THE ARCHITECT & BUILDING NEWS

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JANUARY 3, 1952 · VOL. 201 · NO. 4333 · ONE SHILLING WEEKLY

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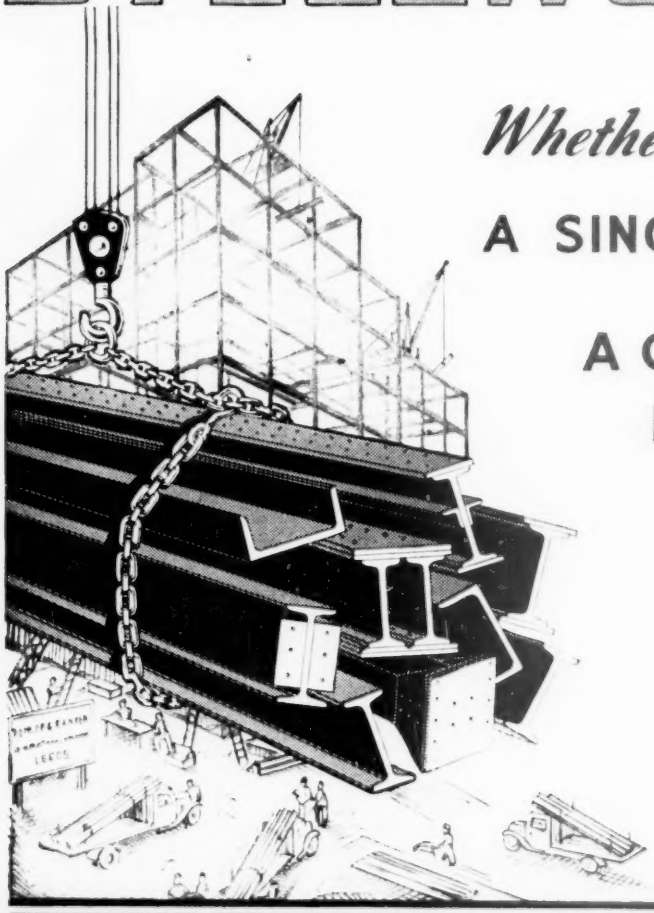

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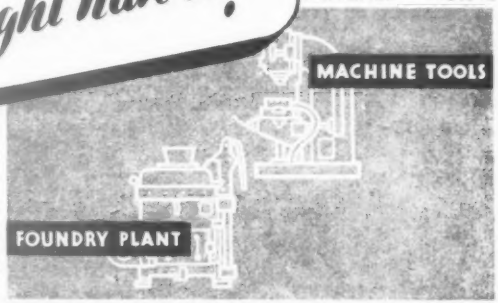

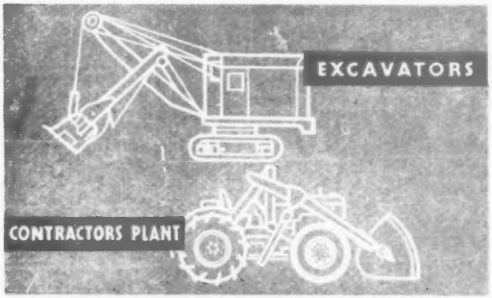

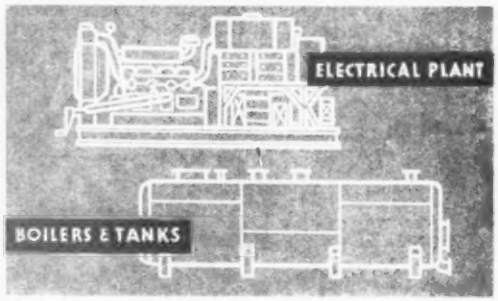

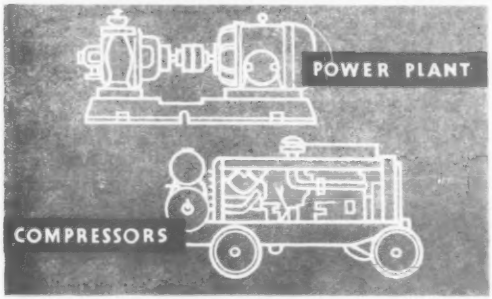

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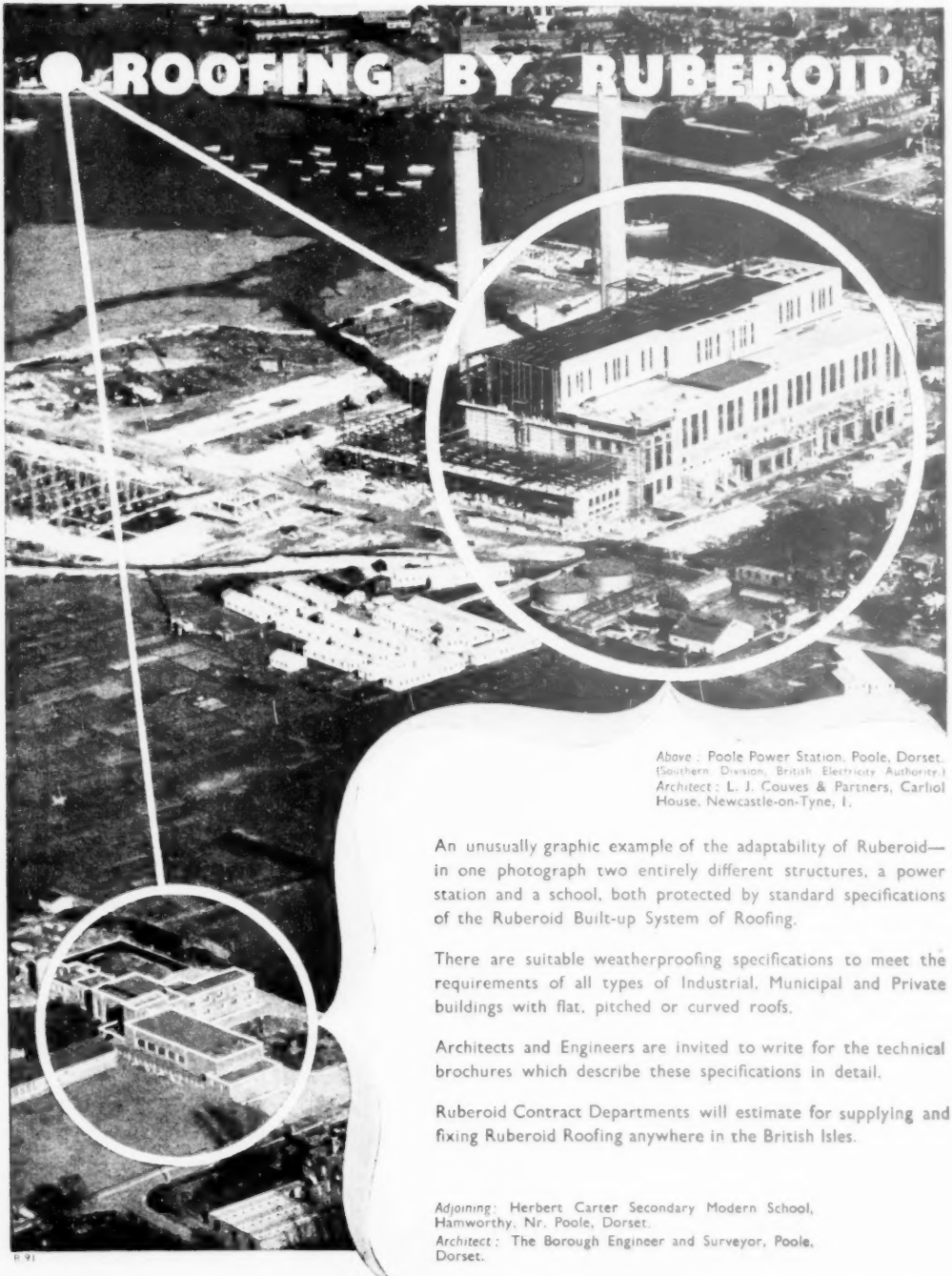

Above: Poole Power Station, Poole, Dorset. (Southern Division, British Electricity Authority.)
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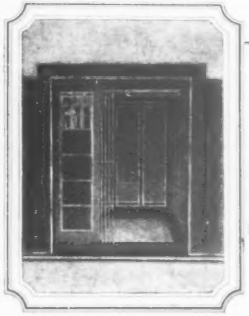

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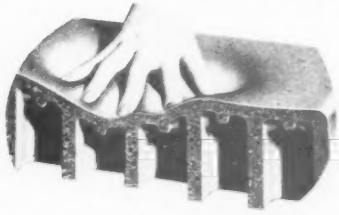

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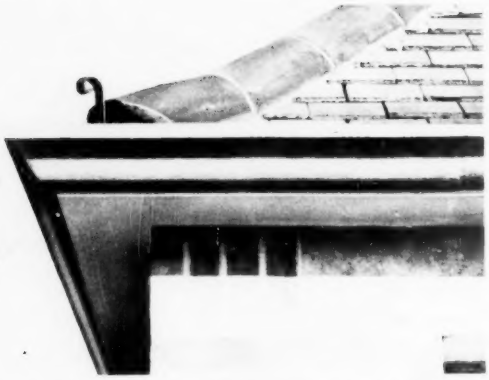

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Vol. 201. No. 4333

THE ARCHITECT & BUILDING NEWS

January 3, 1952

The "Architect and Building News" incorporates the "Architect," founded in 1869, and the "Building News," founded in 1854. The annual subscription, inland and overseas, is £2 15s. 0d. post paid; U.S.A. and Canada $9.00

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LONDON PLAN

THE County Council has passed the plan sent up from its departments and committees and it becomes the statutory Development Plan; it is now submitted to the Minister for comment and approval or otherwise.

The plan so submitted is, of course, required under an act of Parliament, a technical and legal instruction to "show a leg"; it is stressed that it will be spread over a period of twenty years and will cost the County about £540,000,000. (Kingsway was planned about 1900 and, with Aldwych and its buildings, was not complete until about 1930.)

It is to be assumed that the background, the master reference for the new plan, is to be found in the 1943 Plan of Forshaw and Abercrombie, though in some respects it is difficult to believe that this is a correct assumption.

While every master-plan must submit to revision in the light of successive examinations over the years, the object of an all-over plan, which considers all the interrelated factors of an area, is to be a background for reference throughout all the changes that may occur, either in people or in space or time. As such it is a check against the encroachments of mere expediency or the vagaries, whims or biases of persons or parties or even of economics.

It is worth a moment's consideration to examine whether this principle is in the present development plan. We would not wish to suggest that the plan is inadequate—for the present time, or that it is unrealistic—within the knowledge and vision of its proposers; but what it omits and what it drops from the original master-plan conception and philosophy is probably more important than what it contains or retains. Prof. Abercrombie suggests that there is some satisfaction in "that with the exception of one important feature, it is substantially the same plan." But is it? All the ring roads are now dropped and the railways and the river as a highway and the canals are omitted from detailed consideration as are many other concepts, for example, precincting and the location of main markets in relation to transport and distribution; presumably these must be left to a more distant twenty years with which we cannot now be concerned.

Whether the County planners retain the community ideal for London cannot be determined, because statutory development plans do not require this element of social structure to be shown; it is presumed it has not been quite lost, for it is stated that "regard has been shown to that structure . . . particularly in siting primary schools."

The new plan has much to say which can be expressed in mere statistics; figures of densities, present and future populations, "overspills," open spaces, values of land required for improvements (or the dropping of them) and so on.

The two factors most fundamental in the planning of any urban area are its communities and its communications. They are interrelated; but the improvement of communications is so vital to the life of London that it is almost a truism to say that no cost is too high or no plan too long-term to accomplish the ultimate end. Communications are concerned with roads, railways, canals, the river and the air; to drop whole sections out of the road plan is to imply that a new basic master-plan must be visualized. Otherwise we cannot but agree with Prof. Abercrombie when he says of the road proposals, "London is (now) faced with the expenditure of many millions on tinkerings which will eventually be ineffective." The fault may be with other bodies than the L.C.C. and mainly perhaps with the Ministry of Transport; if this is so, it is for the Minister to say.

These comments are but introductory to one which we feel is all-important. As time has gone on since

1943, the planning of London has become less and less an ideal and a sincere human attempt to correlate all the analytical factors into a great synthesis and its progress has been marked by greater adherence to planning by statistics and expediency governed by the difficult times in which we find ourselves. (It is not an isolated phenomenon with planning authorities.) We would maintain that the heart of planning is to be found in the exercise of both imagination and of scientific approach and that such an approach leads to a basic all-over plan of permanent value.

There is, because times are difficult, because parties change, because vision and imagination are dimmed, no real reason or cause to depart from such a plan unless it can be proved, from all the points of view that led to its inception, to be at fault. To condemn parts of it from isolated view-points without referring back to the whole is a policy born of desperation, or the demands of legislation—it is expediency and not planning.

There is a change of heart; the methods of planning are fast becoming obsessed with statistics, figures and coloured areas on maps. The vision that paints a picture, even an ideal one, of what we should like to see London look like in twenty or a hundred years' time is fading. We are left wondering and it will not be long before we join Mr. John Summerson in saying "Is there, at this moment, any ground whatever for believing in the future of London?"

Expediency and statistics and statutory requirements are the dull ways of progress; even if they are necessary for the administration of progress, they should be regarded as tools for the use of society and not as shackles to limit its vision and ideals. Once this dull way is well established, and that is the direction that seems indicated, the eye and brain of the "average man" will no longer see and understand. The mediocre and the dull will be the daily bread, and the jam of inspired contrast will disappear till all is flat, average, efficient and sufficient unto the day. Even the Great Wen is more timeless than this and certainly deserves better long-term treatment.

THE ROYAL GOLD MEDALLIST FOR 1952

MR. GREY WORNUM was born in 1888. His maternal great-grandmother was a Riviere, a Huguenot family which has produced five generations of painters. His paternal grandfather was R. N. Wornum, Keeper of the National Gallery and compiler of the Gallery's first catalogue.

After school at Bradfield Mr. Wornum spent a year at the Slade and was then articled to his uncle, R. Seldon Wornum, F.R.I.B.A. During 1906 and 1909 he attended the Architectural Association evening school where he won a bronze and silver medal and a travelling studentship. After working with Messrs. Simpson and Ayrton for a year he set up his own practice in 1911 at the age of 23. His first jobs were altering city premises and designing work for the Duke of Santo Mauro in Spain. For a number of years he was Reader to Herbert Batsford and editor of some 5,000 plates, photographs and excerpts from old books for a series of books on architectural details, chiefly of the eighteenth century.

At the start of the 1914-1918 war Mr. Wornum served with the Artists' Rifles and then with the Durham Light Infantry. He was wounded on the Somme, losing his right eye. After the war he went into partnership with P. D. Hepworth, F.R.I.B.A., and with him did much alteration work in the City and West End. Subsequently he went into partnership with Mr. Louis de Soissons, F.R.I.B.A., and did much domestic work. With Mr. de Soissons he was appointed architect to a majority of the schemes for the Haig Memorial Homes, building schemes at Morden, Liverpool, Sheffield, Warrington and Penzance. Also with Mr. de Soissons his was among the six premiated designs for the Million Masonic Memorial Competition, an example of the type of vertical planning subsequently employed in the R.I.B.A. design. Some examples of Mr. Grey Wornum's work are:—

Flats: At Kensington and Lambeth and in Birmingham (with A. C. Tripe, F.R.I.B.A.). *Convalescent Home:* Callis Court, Broadstairs, Kent. *Houses:* In Weymouth Street, Bayswater (with A. C. Tripe, F.R.I.B.A.) and in Hamilton Terrace. *Housing Schemes:* In Dorking and Lambeth and

in Coventry (with Richard Sheppard, F.R.I.B.A.). *Office Buildings:* Electricity Authority, Surbiton. Gas Industry House (with Sir Aston Webb). *Schools:* British Girls' College, Alexandria, Egypt. *Ships:* 1st-Class accommodation for R.M.S. Queen Elizabeth. *Shops:* For Gas, Light & Coke Company, at Leytonstone and for London Electricity Supply, at Streatham. *Stadium:* For greyhound racing at Clapton (with A. C. Tripe, F.R.I.B.A.). *Street Decorations:* For the Coronation in Regent Street, Strand, Whitehall and Parliament Street.

In 1938 he designed the Highways Depot for the City of Westminster—a central refuse depot costing £220,000—for which he was awarded the London Architecture Bronze Medal.

In 1949/50 he replanned Parliament Square.

EVENTS AND COMMENTS

. . . AND A PROSPEROUS NEW YEAR

I wonder that anyone has the nerve to wish his friends such a year with the Prime Minister's ominous pre-Christmas threats still ringing in his ears. All the same I daresay we shall manage, and agree, this time next year, with last week's leader that "it might have been worse."

I thought that Christmas was badly arranged this year. Next year it will be different. Christmas day falls on a Thursday thus giving three days for recovery, and trying out one's presents. My nicest present this year was the electric train which I gave one of my children. So far it does not require a special room but it may in time. Between us we added thirty books to our library and if we go on at this rate we shall certainly need a new wing to the house before long.

Trade Christmas presents are not what they were. Whether this is caused by shortage of money or the diffidence of architects in breaking the letter of the code of professional conduct I do not know, but small pocket diaries now take the place of cases of champagne and large boxes of Havanna cigars. Mind you I have never even been offered either champagne or cigars but I have always understood that in the good old days . . .

Very few architects can use more than two diaries at once. One is usually kept in the pocket of the suit one wore yesterday and the other is, or should be, on one's office desk. Much time is spent trying to make the entries coincide in each book. Some architects do not pay sufficient attention to this interesting and important facet of their professional lives with the result that they have to employ two secretaries to straighten things out instead of one. One architect I know has only one diary and this is in his pocket, so that it is quite impossible to make an appointment when he is out. Faced with a small pile of charming little diaries at the end of the year it is very difficult to decide which to use. Theoretically I suppose one should send them all back with a polite note; but who does? The trouble is that there are not enough to go round the office and to satisfy family demands as well. Indeed there are too few diaries not too many.

Last New Year's Day I made several resolutions and looking back I find that by some chance I have kept most of them. The one that I remember most clearly was that I resolved not to let impecunious editors buy me oysters . . . none offered to. British Railways to whom I resolved to be more polite have either produced no new designs or have purposely not told me about them. As for this year, I have decided to devote all my spare energies to the promotion of the further education of architects. By this I do not mean their further architectural education, but their preparation to fend for themselves in other walks of life should their main source of livelihood fail. To this end I am about to approach the educational authorities on the subject of special classes for architects in such interesting and remunerative pastimes as counterfeiting, shoplifting, water-divining, fortune-telling, snail-watching, and so on. In addition, I am personally preparing a list of all those magazines which pay money to puzzle winners or the authors of published letters. My Absolutely Certain Guide to the Whole Football Pool Set-up will appear shortly and will be followed by my long awaited technical volume "Are Building Materials Really Necessary?" You will, I am sure, agree that I, at any rate, shall be pulling my weight in the hellfire state for 1952.

THE ROYAL GOLD MEDAL, 1952

Everyone will be pleased to see Mr. G. Grey Wornum's name added to those carved on the left-hand wall in the entrance hall of the R.I.B.A. As the designer of the building he is already represented there by a bronze head by Mr. Charles Wheeler. The R.I.B.A. building is Mr. Grey Wornum's best known work and unlike the work of many other architects it really is well known to hundreds of architects who use it during the course of the year. Some people do not like the building at all but I have always admired it although I like some parts better than others. I know of no building better suited for the formal occasion, and I am still impressed by the ingenuity of the section. It is not Mr. Wornum's fault that the place is now hopelessly overcrowded.

Mr. Grey Wornum has been living in America for some time now and for much of that time he has been very ill. Recently news of his health has been better and I hope very much that the award of the Royal Gold Medal, earned by a lifetime of good and progressive work, will help him on the road to recovery. He used to be seen at almost every architectural function in London and I for one miss him very much. We all hope that he will be well enough to come to England to receive the medal. If he does I shall be there.

A.A. SYMPOSIUM ON COLLEGE OF FURTHER EDUCATION

Copies of the collected papers and discussions which made up the recent Symposium at the Architectural Association can be obtained from the Secretary at 36, Bedford Square.

BIRMINGHAM STUDENTS TRY IT OUT ON THE DOG

I was interested to see the results of the Birmingham School of Architecture experiment published last week. The houses look very well and have suffered several seachanges since I saw the Preliminary designs some long time ago. I suppose there will be critics of this experiment and we shall have cries that students are taking away the qualified man's bread and butter. If such experiments grew in number to the point that they did interfere with people earning their livings then it would be a bad thing, but I look upon this particular job as a piece of excellent co-operation between a City Engineer and the Municipal School of Architecture. Mr. Manzoni and Mr. Douglas Jones—and the students—are to be congratulated on keeping the Birmingham light shining brightly.

FRIENDS OF THE SKYLON

The L.C.C. is considering carting the Skylon to Penge at a cost of £30,000. It seems a lot of money. I like the Skylon very much but not, I think, that much. Writing in *The Times* recently, Mr. John Pudney suggested that an organization which might be called the Friends of the

Skylon should be formed to campaign for the retention of the Skylon in its present place. This seems to me to be a good idea and as neat a way of saving £30,000 as I have heard of recently. Count me one of the friends, chum.

THE "SUNDAY TIMES" AND THE SOUTH BANK

The winning design by Mr. Denis Mason Jones—who, incidentally won a consolation prize in the A.B.S. competition, interesting double—strikes me as being both competent and pleasant. He makes no bones about moving the site of the National theatre and retaining the shot tower. These are surely the key points in any scheme of permanent development. Mr. Mason Jones has retained plenty of open space and has had the bright idea of incorporating one of the old wooden walls of England in a permanent dry dock similar to the setting of H.M.S. *Victory*, at Portsmouth.

THE OXFORD GAS WORKS

You will remember the fuss over the proposed extension to the Oxford gas works. You may also remember that the outcome was that the Southern Gas Board changed its mind and agreed to build a new works on another site and to transfer the existing works to the new site gradually, thus removing an eyesore which has disgraced the nation for years. Now, quite suddenly and without consulting the other parties, the Southern Gas Board has decided to go back on the agreement and to add to the existing works on the grounds that an increased supply of gas can be obtained more quickly and more cheaply than by adhering to the agreed plan. The reversion to the original scheme thus comes up as a fresh proposal backed by a speech from the chairman of the Southern Gas Board, in which the principal enemy of planning, expediency, looms largely and is strongly supported by threats of insufficient gas in Oxford.

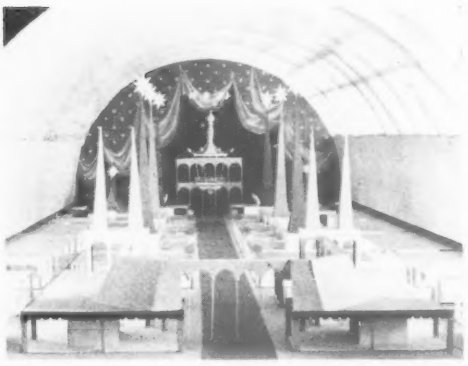
The name of the Royal Fine Art Commission is mentioned in the speech as if its nod of approval were a gas works manager's panacea. I suppose the whole thing must be argued out again and public opinion once more stirred up. Let us to battle then. Nothing short of the complete removal of the existing works will do. The first answering blow has already been struck in *The Times* by the Vice-Chancellor of the University, the Mayor and the Chairman of the County Council.

ST. PAUL'S ECHOES

According to the *Manchester Guardian* someone recently had the temerity to fire a pistol from the pulpit of St. Paul's Cathedral. I do not know whether Mr. Hope Bagenal was present but the réverberation is said to have lasted for ten and three-fifths seconds. Although Wren was ingenious enough to sound-deaden the floors of Hampton Court Palace with crushed oyster shells—plenty of wealthy editors about then—he does not seem to have bothered very much about the acoustics of his cathedral, and quite right, too. It is said that the only occasion on which the acoustics of St. Paul's were good was at the funeral of the Duke of Wellington, when the interior was entirely draped in black crepe. I wonder where it all came from at such short notice.

IDEAL HOME

I hardly like to mention it, but you all know what follows the Circus at Olympia, which is now in full swing. The design for the layout of the main hall has been published. It seems to me to have a slightly near-Eastern flavour. A little too near for comfort I should say. It will include a suspended bandstand "high among the star-capped pinnacles that line a highway of moss-green carpet." I suppose that there is a fair chance of finding a fire-escape parked in the highway to enable a band of suspended firemen to reach the bandstand.



It is hoped that one of the principal exhibits will be two houses, one three-bedroomed and one two, built to the Dudley formula. These will be shown by the Ministry of Housing and Local Government if it has not changed its name again by then.

PERMANENT CARAVANS

With the shortage of houses my views on caravan dwellers have been lenient. Permanent camp sites are, however, increasing at an alarming rate and are causing much concern to local authorities. In the Lancing area, for example, one person in ten is said to live in a caravan. People must live somewhere and if caravan development is not precisely what the town planners would like it is being forced upon us. Bearing all this in mind the news that a section of this year's Ideal Home Exhibition is to be devoted to permanent caravans is hardly surprising, although it comes as a shock if you see what I mean. All the very latest designs will be on view crammed, it is said, with "superfine ingenuities." You will, I am sure, be pleased to hear that according to a Press handout, the caravan building industry "cradles an export trade."

NEXT YEAR'S L.M.B.A. PRESIDENT

My friend, David Woodbine-Parish is to be president of the L.M.B.A. next year. This is an excellent idea. He is ample in frame and outlook and I know of no one more devoted to the cause of education in the building industry. Mr. Parish is married to an architect, but this has in no way diminished his independence of thought on the subject—architects, not marriage.

HONOUR FOR FREYSINNET

The University of Leeds is to confer the honorary degree of Doctor of Science on M. Eugene Freysinnet, the pre-stressed concrete pioneer at a congregation to be held on May 15.

ABNER

NEWS OF THE WEEK

New Year Honours

KNIGHT BACHELOR

Alderman Alfred Ernest Shennan, F.R.I.B.A., J.P., for political and public services in Liverpool.

Hugh Maxwell Casson, M.A. (Cantab), F.R.I.B.A., Director of Architecture, F.O.B.

C.B.E.

Ian Herbert Cox, Director Science and Technology, F.O.B.

Ralph Freeman, M.B.E., M.I.C.E., Consulting Civil Engineer, South Bank Exhibition.

Frederick Measham Lea, O.B.E., D.Sc., F.R.I.C., Director, Building Research Station.

Howard Vicars Lobb, F.R.I.B.A., Chairman Council of Architecture and Town Planning, F.O.B.

Robert Hogg Matthew, A.R.I.B.A., Architect to the L.C.C., for services to F.O.B.

Cyril Herbert Walker, O.B.E., M.C., F.R.I.C.S., F.R.I.B.A., Director of Housing and Valuer, L.C.C.

O.B.E.

Paul Herve Giraud Wright, Director of Public Relations, F.O.B.

M.B.E.

George Alexander Sexton, J.P., F.R.I.C.S., L.R.I.B.A.

Royal Gold Medal for Architecture

At a Council meeting of the Royal Institute of British Architects held on Tuesday, December 11, 1951, Mr. G. Grey Wornum, F.R.I.B.A., was elected by the members as a fit recipient of the Royal Gold Medal for Architecture for the year 1952.

His Majesty the King has approved the award and the Medal will be presented to Mr. G. Grey Wornum at the General Meeting of the Royal Institute on Tuesday, April 1, 1952, at 6.0 p.m.

Development Plans, Scotland

At the end of the year, out of 57 planning authorities in Scotland, three have submitted complete plans for their areas to the Secretary of State. These are the County of Inverness, Burgh of Paisley and Burgh of Motherwell and Wishaw. In addition, two part plans have also been submitted, one by Fife County Council for the "Levenmouth Area," which includes two burghs, and a new town project by the County Council, and one by the Burgh of Clydebank for a Central Development Area.

The Development Plan for the City of Glasgow has now been completed and is to be submitted to the Secretary of State.

Central Land Board Announcements

Rebuilding—Other than Dwelling Houses. Third Schedule Rights

The Central Land Board will regard the Third Schedule of the Town and Country Planning Act, 1947, as permitting a single building, other than a dwelling house, to be rebuilt free of development charge as two or more buildings which together comprise not more than the cubic content of the original building, plus any available enlargement tolerance.

Where such a building, or its foundation site, is sold in two or more parts, the purchaser of any part will therefore have the right (provided it has not already been exercised) to rebuild free of development charge on his land a building not larger in cubic content than that part of the original building which formerly stood upon it, plus any available tolerance.

Rebuilding and Enlargement Tolerances

The effect of paragraphs 1 and 3 of the Third Schedule of the Town and Country Planning Act, 1947, together with the Exemption Regulations (S.I. 1950, No. 1233), is to provide an exemption from development charge when buildings are rebuilt, enlarged by 10 per cent (or by 7,500 cubic feet in the case of houses) or enlarged to a similar extent on rebuilding. The Central Land Board will treat as exempt any rebuilding or enlargement within these tolerances provided it takes place within the curtilage as it exists at the time the development takes place.

When the addition of land to the curtilage of a building results in a material change of use of that land, planning permission is required and a liability to development charge arises. Consent value for the purpose of assessing development charge in these circumstances will necessarily be affected by the principles set out above, especially if the curtilage without the additional land is not large enough to allow the carrying out of the full rebuilding and enlargement tolerances thereon.

Concrete Technology Lecture Course

A course in Concrete Technology and Building Administration has been organized in the Department of Building, Heriot-Watt College, Edinburgh, and will be available during the Spring term commencing January 9, 1952.

The course will consist of twelve lectures, the first five on Concrete Technology will be given by Mr. J. V. Valentine, L.I.O.B. Each lecture to be followed by practical work in the laboratory.

The remaining seven lectures will be given by various specialists representing the Ministry of Works, H.M. Inspectorate (Factories), the Building industry and the allied professions. The Chairman will be Mr. Norman C. Sidwell, B.Sc., A.R.I.C.S., Head of the Department of Building at the Heriot-Watt College. The seven lectures will deal with Building (Safety) Regulations, Site Records, Labour Management, Site Administration, Mechanical Plant, Building Law, and will include a description of the work carried out at the Scottish Building Station.

ANNOUNCEMENTS

David E. Morrison, B.A. (Hons.), A.R.I.B.A., and L. Melville Rose, L.M.I.A.S., A.F.S. (Eng.), Chartered Architects and Surveyors, have acquired more extensive premises at 8, Park Street, Mayfair, London, W1 (Tel.: Grosvenor 7522 (3 lines)), and their practice will continue at that address.

Messrs. Hammond & Jack, Architects and Surveyors, of 130-131, Salisbury House, Finsbury Circus, London, E.C.2, have taken into partnership Mr. K. A. Saunders, L.R.I.B.A. The title of the firm and their address remain the same.

Mr. A. W. R. Hewitt, A.R.I.B.A., Deputy Borough Architect to Gravesend, has resigned and is entering private business.

COMING EVENTS

R.I.B.A.

January 8, at 6 p.m.—Announcement of Award of Prizes and Studentships. Lecture by Frederick Gibberd, M.T.P.I., F.R.I.B.A., on "Expression in Modern Architecture," at 66, Portland Place, W.1.

R.I.C.S.

January 7, at 5.30 p.m.—Ordinary General Meeting. Address by W. H. Rothwell, B.Sc., F.R.I.C.S., on "The Theory of Valuations: the Effect of the Town and Country Planning Act, 1947," at 12, Gt. George Street, S.W.1.

L.M.B.A.

January 9, at 2 p.m.—Annual General Meeting, preceded by a luncheon at 12.45 for 1 p.m. at Derry & Tom's Restaurant, Kensington High Street. Guest of Honour, Mr. D. E. Woodbine Parish, F.I.O.B.

The Late Harry Batsford

THE death of Harry Batsford (Hon. A.R.I.B.A.) leaves a very real gap in the world of architectural appreciation. For the firm whose head he was has done very much, by its publications designed to reach a larger public than those who will ever read or consult detailed or specialist works on architecture, to "put architecture on the map" as one of the arts to be seen and appreciated among the noblest; there is still, of course, a vast amount to do, and one hopes that Harry Bats-

ford's successors will continue and reinforce their work in the field of architectural education.

The way in which Harry Batsford's work was chiefly done was by the bringing out of a long series of "popular," copiously illustrated works on almost every imaginable aspect of English architecture and topography. The text that went with the illustrations was sometimes less expert and specialist than in the firm's earlier, and in many cases more lavish, productions, but some of their more recent publications within the field of their current policy, for example, those on Georgian churches and the Adam and Regency styles, have been among the leading and standard authorities on their subjects. Even the works which less obviously set out to be exhaustive were none the less excellent as providing valuable indications, in every part of the country and for many subjects, of what there is to see and where one can see it and then form one's own judgment, while the popular prestige of the firm, built up in very large measure by Harry Batsford's direction of their affairs, draws readers who might not otherwise think of getting a book whose main topic is architectural.

My personal acquaintance with Mr. Batsford, as one only recently honoured by admission to the ranks of his writers, was too little for me to speak with authority on his personality. But I can testify without reserve to his friendly kindness, and to his great knowledge of places and persons that made him a mine of information on who to consult in practically every place in this country where one might conceivably go in search of architectural and kindred information. B. L.

CORRESPONDENCE

CIAM Conference

A Postcript to the Report of July 26, 1951

To the Editor of A. & B.N.

Sir,—From my report on the CIAM Meeting on architectural education an interesting correspondence has developed with Prof. Gropius.

Prof. Gropius gives me a free hand in quoting from his letters and his cause is best served by quoting these as fully as possible. He writes:

Dear Mr. Rosenthal,

I have read with interest your report on the discussion of architectural education during our CIAM Conference in July of this year. I felt your report was excellent, but I missed one important point.

You state: "I have heard all this before" but the main issue of my talk was something which I have not yet heard in a direct way anywhere else.

I have decided to run amok against the usual set-up in our profession, a gentleman's profession of trusteeship, with over-emphasis on æsthetics. I am going round telling every student that he should not follow the so-called ethical outline of the leading professional organizations but that I see hope for the profession only if he joins hands with the engineer and contractor, that is to say that he goes back into the building production. This was more or less the essence of my talk and of a similar talk that was given over the B.B.C. and published in the *Listener* of Aug. 23, 1951, entitled "Architecture in the Scientific Age."

I am sure the professional organizations at present will not like the approach, but I have come to the conclusion that I will fight for this opinion, because there I see the only hope of getting our profession into the lead again. I thought that this is definitely opening a new front in architectural education which is a challenge to the conditions as they are, and which will have a lot of consequences—if accepted for our curriculum.

Very sincerely yours,
Walter Gropius,
Professor of Architecture.

This is not an appropriate occasion to enlarge on my own thoughts on the matter but I feel an excerpt from my letter to Gropius in reply might be acceptable. It does, of course, not touch at this stage on the vital item in connection with professional ideology.

——I am sorry if I sounded somewhat superior when I said: "I seem to have heard all this before" and it only shows how careful one has to be when putting anything into print. It is true enough that your main point has never been said so directly before, but after attending conferences on achitectural education up and down the country and being myself closely connected with architectural education I felt that on the whole the thoughts and requirements expressed by CIAM were no longer new, at least to teachers of architecture at the more progressive schools of which ours—Leicester—is one. On this I did enlarge in my report. As to your chief point, regarding joining hands with the engineer and contractor, this idea seems to be taking shape slowly in some of the curricula. However, the objection to closer collaboration, particularly with the contractor, seems to be coming as much from that side as from the architects' which may often be due to the fact that the architect is suspected of not really knowing how to build.——

The remainder of my letter dealt with further thoughts arising out of it all and in Gropius' second letter he takes up this matter of professional ideology even more vividly. He says: "——I have found almost nowhere in the world any attempt to make it clear to the students in architecture that the future will force them to join the production process again and to my knowledge no attacks have been made against the basic paragraphs of the R.I.B.A., the A.I.A., or the B.D.A. to take a different course away from the usual trusteeship character of the architect. I am delighted that you seem to think on the same line. I think it will need a rather vigorous campaign to carry this into the forefront. After long deliberation I have decided to do so myself, because I have come to believe that this is the only course open to the architectural profession in order to be safe again and to avoid being pushed against the wall because the average man does not understand the trusteeship approach.——"

He ends by referring once more to the talk on the B.B.C. and welcoming every opportunity of "pushing it further."

There are so many problems affecting the whole gamut of architectural and general education, which I hope to make the subject of a later treatise. Let this merely be a postscript.

H. W. ROSENTHAL.

N.U.S Report

To the Editor of A. & B. N.

Sir,—Mr. Sidney Loweth in his letter suggests a visit to the U.S.S.R. by 50 British architects, with which we heartily agree, but we should like to suggest that the party would be greatly strengthened by the addition of a few building contractors and quantity surveyors.

In your issue of December 20 there was an article on the "Permanent Building Exhibition in Moscow" over the name of Nikolai Kovalev, and we should like to make the following comments:—

(1) The top photograph shows a collection of mechanical plant placed on a grass verge under trees, in what appears to be a public park. Is the writer sure that the Exhibition in question is a permanent one, and does he appreciate the fact that the items of plant exhibited are not particularly appropriate to building?

(2) The second picture shows a group of boys being shown round some brickwork exhibits by a lady. Has Mr. Kovalev noticed that the exhibition brickwork in the foreground is conspicuous by its utter disregard of bond?

(3) In the third picture there is no evidence of bonding or through stones or other means of tying back the stone facing, whilst the backing appears to consist of a half-brick skin filled in with brick rubble. The mortar joints vary in thickness to an extent that would not be tolerated by a clerk of works in Britain.

If this craftsmanship is typically Russian and the elevations of the new Berlin Embassy are also typically Russian, it would appear that the visiting party will have no difficulty in preparing a fully comprehensive report.

I am, etc.,
K. P. RUSH,
Director, Rush & Tompkins, Ltd.,
formerly
Kent & Sussex Contractors, Ltd.

Reconstruction of the

FREE TRADE HALL, MANCHESTER

architect : LEONARD HOWITT, F.R.I.B.A, M.T.P.I., city architect

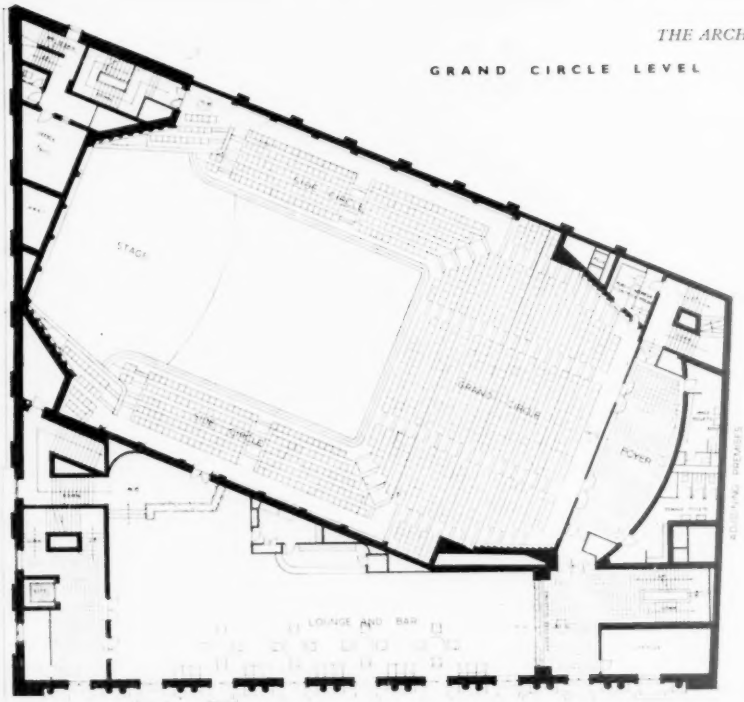
senior assistant architect : H. HOLLINGSWORTH, A.R.I.B.A.

AFTER the fire started by the bombs of December, 1940, the facades to Peter Street and South Street and a portion of the thick inner wall of the Large Hall were the only parts of the old Free Trade Hall left that were sound enough to be incorporated in the reconstruction. In places the external stonework had suffered severely from the flames but sufficient was unharmed to justify its retention. Thus the long familiar elevations, pictured on page 16, cleaned and repaired, still grace the main front and side.

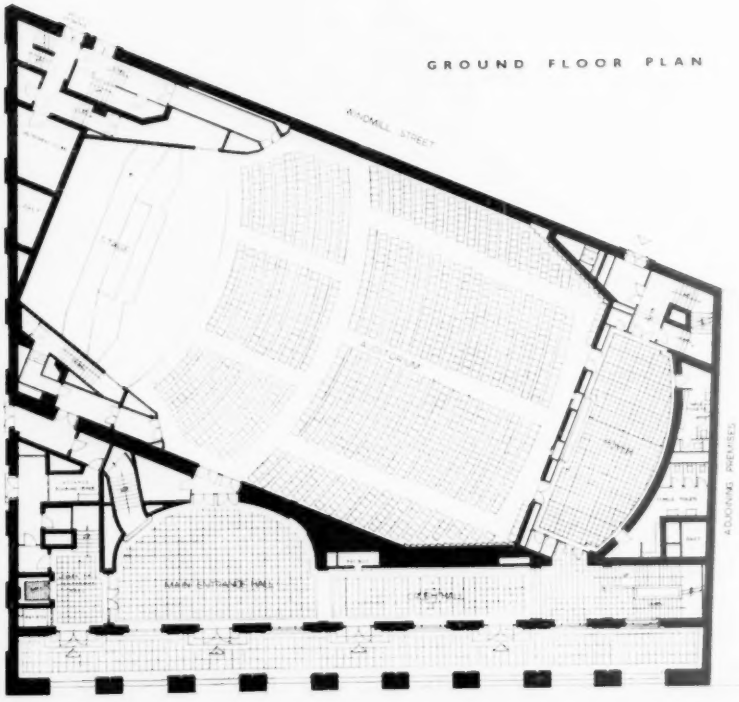
Built in 1856, the old Free Trade Hall contained several features which did not accord with present day ideas and standards. The opportunity was therefore taken to review the accommodation requirements and to re-plan the building, subject to the limitations provided by the retention of the two principal facades.

It was required that the Large Hall should have greater seating capacity and improved circulatory and foyer space. The platform was to be large enough to accommodate a symphony orchestra and a choir with appropriate facilities and amenities for the artistes conveniently accessible. The hall was to be an all-purpose hall like its predecessor.

GRAND CIRCLE LEVEL



GROUND FLOOR PLAN



Glazed doors ornamented with decorative panels whose motif is the cotton plant, lead from the Peter Street arcade to the entrance halls. The first doors, next to South Street lead into the Lesser Hall entrance from which stairs and a lift give access to the small Hall on the second floor. The next is the main entrance to the Large Hall and with two others leads into the travertine paved Crush Hall which adjoins the arcade. At one end it communicates with the Lesser Hall entrance and at the other are the main stairs leading to the Circle and Balcony above and to Stalls cloakrooms and toilet accommodation below. At its widest part, doors into the Large Hall surmounted by the Manchester Coat of Arms in relief and full colour form the central feature of an elliptical recess faced with blue hide panelling. To one side of this recess is a stair to the First Floor and, balancing it on the other side, a tablet commemorating the opening of the new building. At the opposite end of the Crush Hall is the entrance to the foyer at the rear of the Large Hall; here the central feature is the stone laid by H.R.H. Princess Margaret on 27th March, 1950, to commemorate the start of the re-building. Above it is a mural by Mr. A. Sherwood Edwards representing the Peterloo incident of 1819, part of the site of which is within the walls of the Free Trade Hall.

The Ground Floor of the Large Hall contains seats for 1,214. These are designed so that they can be dissembled into units of three or four seats and stacked in a chair store below or re-arranged to suit any particular function. All the seats are of the tip-up variety, with Dunlopillo upholstery and acoustically absorbent surfaces underneath with the object of avoiding sound reflections from unoccupied seats. The floor is of English beech in narrow widths polished for dancing and on all other occasions is protected by a canvas covering.

The total seating capacity for public meeting purposes is 2,886 and for orchestral concerts 2,560.

The platform is arranged in tiers to accommodate 100 instrumentalists or seating and incorporates a piano lift from the air-conditioned store beneath; here is also stored the console of the Compton Electrone Organ. Provision has been made for the attachment of a fore-stage when extra platform space is needed.

The music stands are similar to those used at the Royal Festival Hall which were designed by Mr.

R. H. Matthew, A.R.I.B.A., Architect to the London County Council.

The side walls of the Ground Floor are lined with limed oak panelling and the rear wall with walnut. The wall behind the platform is faced with decorative panelling in a combination of teak, sycamore and laurel, the central feature is the City coat of arms carved on obeche and painted in full heraldic colours.

Over the platform is a series of three sycamore-faced sound reflectors between which are concealed floodlights. Incorporated in the reflectors are speakers connected with the public address system and others serving the electrone organ; the organ chamber is located behind and above the reflectors. The splayed side walls above the polished oak panelling are broadly fluted, an acoustic requirement which is here turned to decorative use.

The raking Grand Circle and Side Circles contain 915 fixed seats and above the Grand Circle is the Balcony, seating 466. These are entered from Foyers at the rear reached by the main stair from the Crush Hall; cloakroom and lavatory accommodation for the occupants of these galleries are suitably disposed and other stairways lead to emergency exits in Windmill Street.

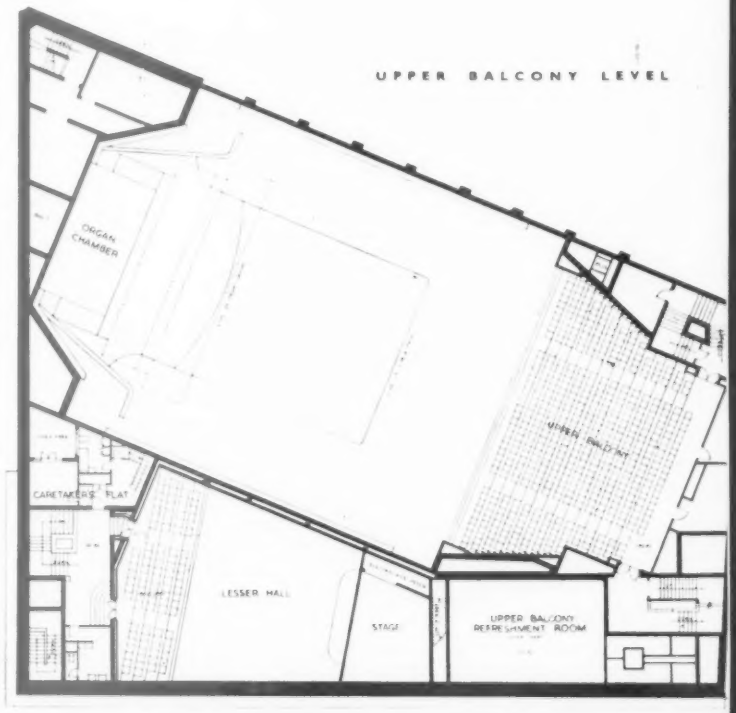
The main walls of the Hall above the Side Circle embody decorative pilastered features which also have the functional purpose of providing acoustically diffusing and absorbent surfaces in the required proportions. The upper panels incorporate the coat of arms, in full heraldic colours, of bodies prominent in the city and neighbouring local authorities.

For acoustic reasons the splayed side walls to the Circle and Balcony and at the rear of the Ground Floor are broken into a series of vertical planes at right angles to each other. For similar reasons the lofty ceiling over the body of the Hall is deeply coffered and embodies the requisite absorbent and reflective surfaces.

The Lesser Hall is above the Lounge and seats 417 of which 95 are in the balcony. It is designed to suit a number of purposes and the seating on the main floor is removable to permit dancing, small exhibitions and other functions requiring a cleared floor space. The small stage is fully equipped to suit amateur theatrical productions and a suite of dressing rooms and a Green Room are provided.

The Lesser Hall is insulated structurally from the Large Hall in order that there should be no sound transmission between the two Halls.

[Continued overleaf



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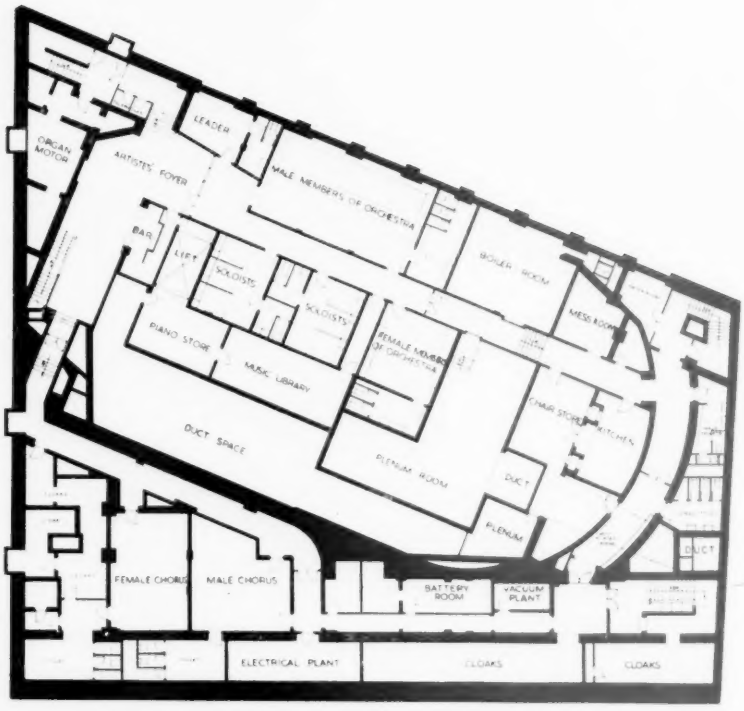


BASEMENT PLAN

The decorative scheme is simple and makes use of features requisite to the acoustic treatment.

The new elevation to Windmill Street is in golden biscuit coloured sand faced bricks with sand-stone dressings and is relieved by eight projecting piers encasing structural steel stancheons each of which is surmounted by a figure in Portland Stone representing the different activities which took place in the old Free Trade Hall.

These figures, modelled by Mr. A. Sherwood Edwards, and carved by Messrs. Bond and Hall, sculptors, portray the Dancers, Female Soloist, Conductor, Cinematograph Operator, Boxer, Schoolmaster and Pupil, Actress and Orator.

The Hall is warmed by a combination of direct heating and the circulation of warmed air through the ventilation system. Owing to limitations of space and the convenience of gas as fuel, four Vesta gas-fired hot water heating boilers are installed.

The whole system is under full thermostatic control which is designed on the mixed water principle so that the correct degree of heating can be introduced at all times without running the boilers at a destructively low temperature.

The electrical installation is complex and incorporates several novel features. The main switchboard is housed in the Basement adjacent to the supply intake; the lighting switchboard is located in a Switch Room on the Ground Floor adjacent to the Large Hall and all lights in the public spaces in the building are controlled from this point.

The lighting throughout the building is by tungsten filament lamps enclosed in fittings of various types; the decorative lighting fittings in the Large Hall and other important positions have been specially designed.

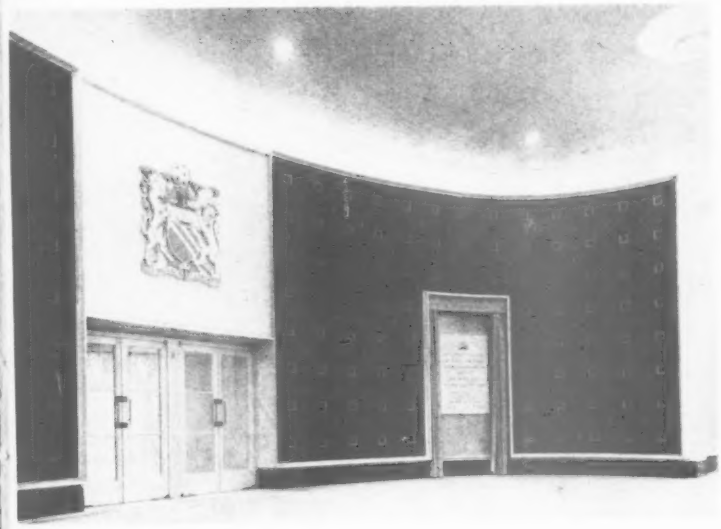
There is a comprehensive emergency lighting installation incorporating batteries supplying 240 volts pressure operating through an automatic change-over switch in the event of failure of the main supply.

The platform lighting equipment in the Large Hall and the auditorium general lighting are controlled by motorized dimmer banks which can be operated from remote controls in three alternative positions—from the side of the platform, from the film projection suite and from a control console at a position on the Side Circle.

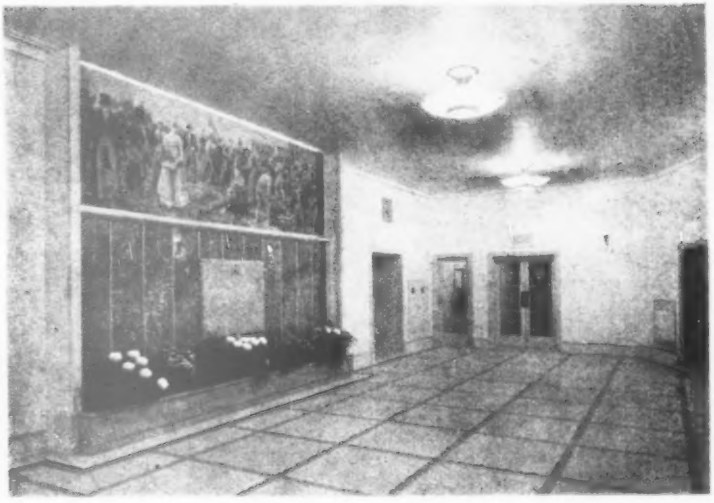
The Lesser Hall stage is installed with suitable stage lighting equipment controlled from the electrician's gallery at the side of the stage.

Public address systems are installed in the Large Hall and the Lesser Hall; a tie line provides for the interconnection of the two Halls in the event of the Lesser Hall being required to accommodate an overflow audience and the Lounge is equipped with speakers for a similar purpose. The equipment in the Large Hall incorporates a delay unit which ensures the coincidence of

MANCHESTER FREE TRADE HALL



Entrance Hall. The dark panelling is in leather and the fibrous plaster Coat of Arms over the doors to the main hall is in full colour.



Foyer at rear of the stalls showing the Peterloo mural by A. Sherwood Edwards and foundation stone laid by Princess Margaret. The panelling below the mural is in Derbyshire fossil stone.

The Crush Hall adjoining the entrance arcade with ticket booth on the left.

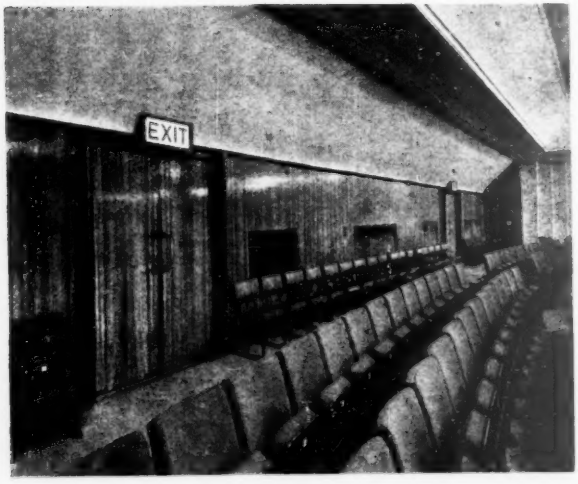
the spoken word and the amplified word issuing from the loudspeakers at the rear of the Hall. The dressing rooms in both Halls are connected to the respective installations in order that the artistes may follow the progress of the performance taking place on the platform or stage. In both Halls a number of seats are fitted with socket outlets for the attachment of deaf-aid facilities.

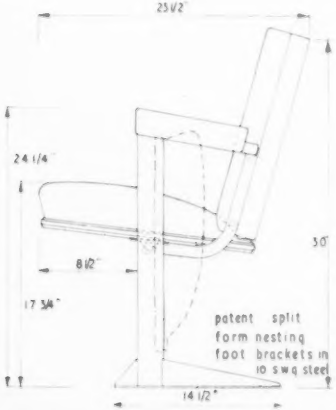
The B.B.C. Commentator's Room and Recording Room are served by conduits to suit their cables and there are facilities for suspending microphones in the body of the Hall.

A cinema projection suite is located above the rear of the Balcony and all electrical services are provided to suit the future installation of projection equipment.

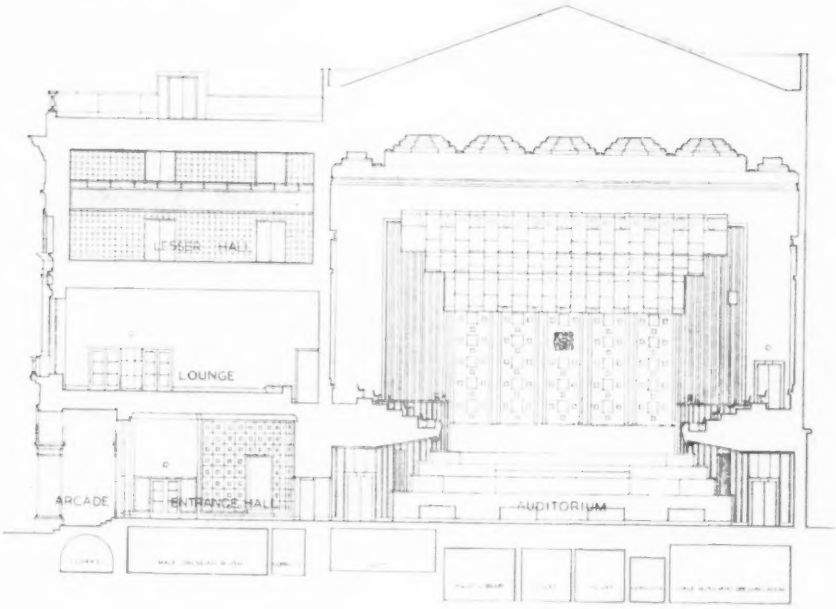
The estimated cost of the building, including furnishing is £420,000.

The large hall taken from the side circle. The upper panels of the pilastered features on the side walls incorporate Coat of Arms, in full heraldic colours, of bodies prominent in the City and neighbouring local authorities. The coffered ceiling was required for acoustic purposes. The view below shows the Australian oak flush panelling and exit doors at the rear of the hall. The detail illustrates one of the four types of seat. Two types of seat are capable of being stacked into less than one third of the area they occupy in seating formation.

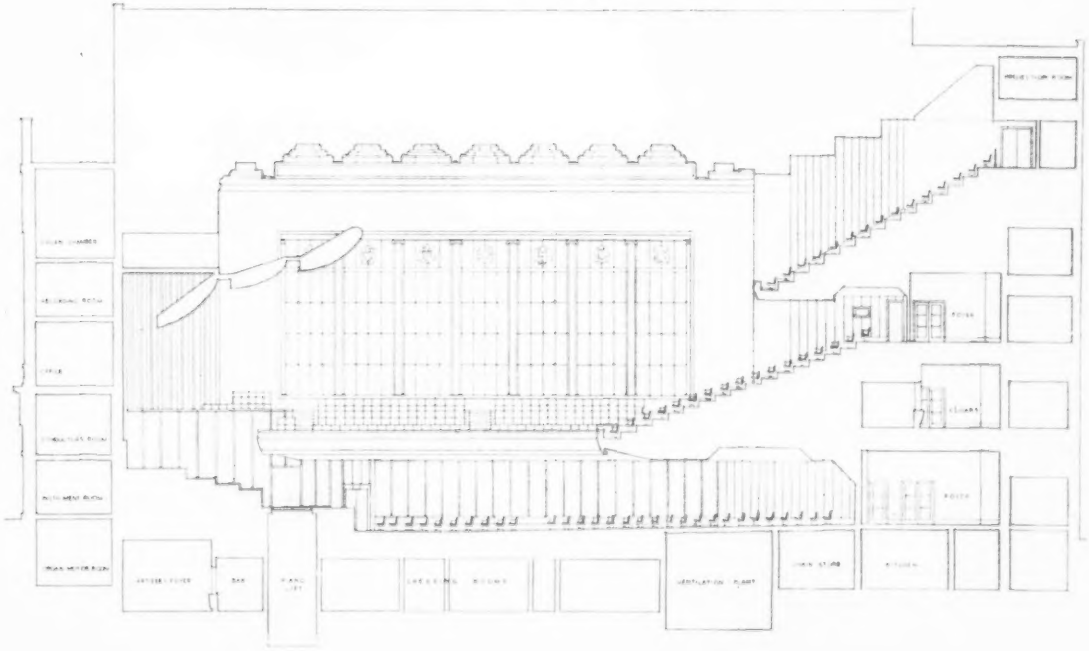




portable nesting type in banks a armrests



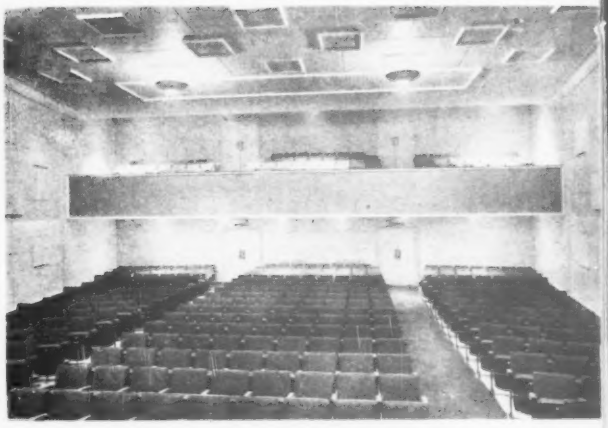
SECTIONS THROUGH MAIN HALL



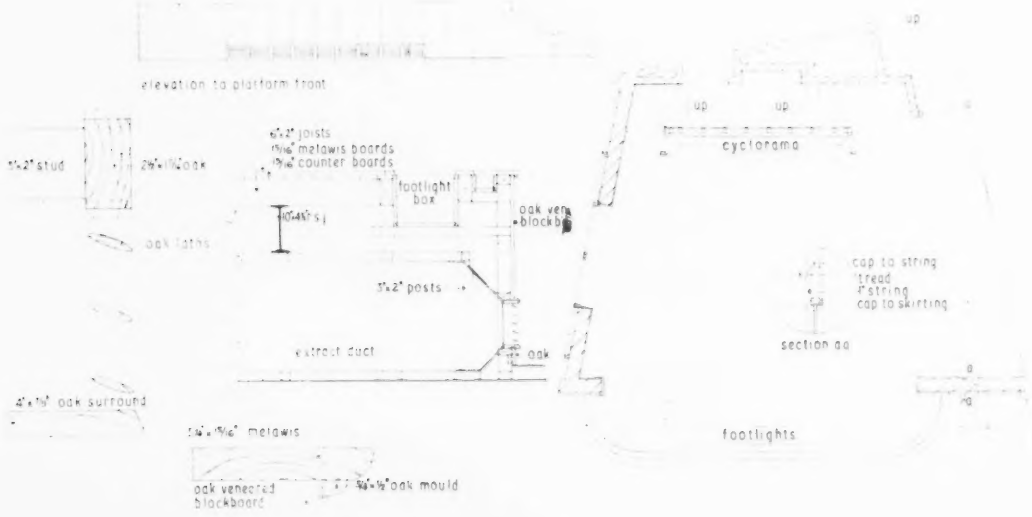
MANCHESTER

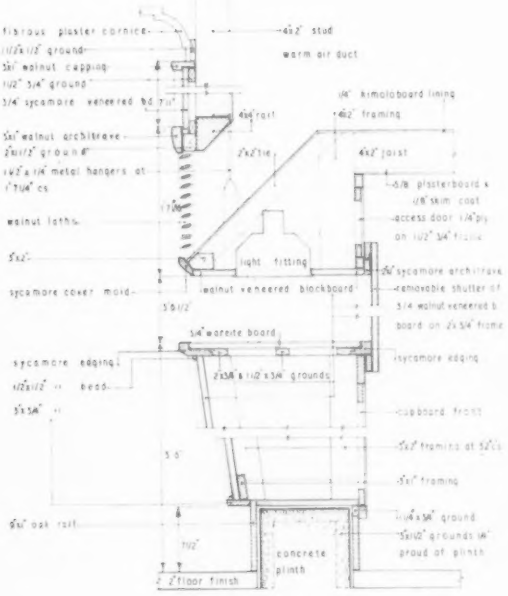
FREE TRADE HALL.

LESSER HALL.

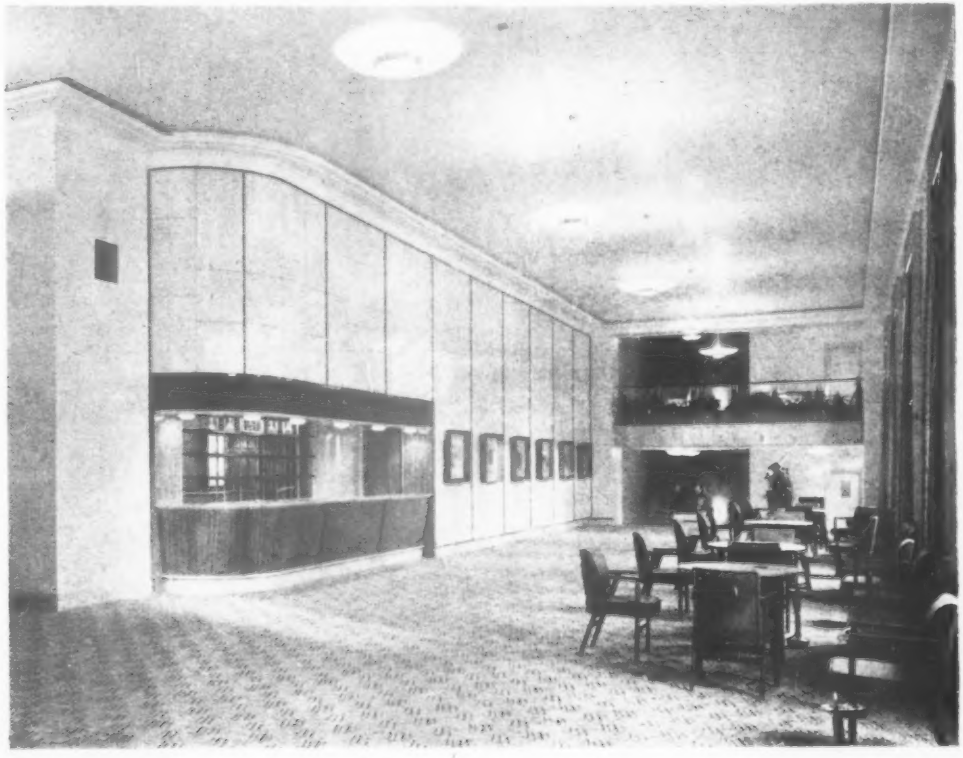


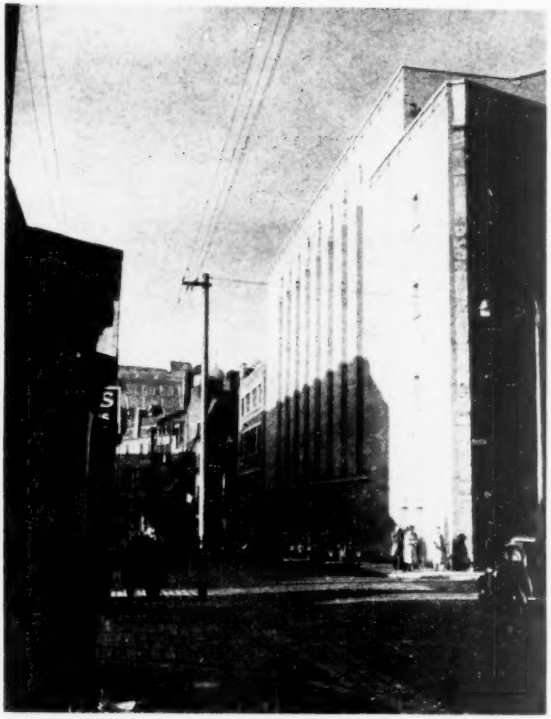
The Lesser Hall which is designed to suit a number of purposes, is insulated structurally from the main hall in order that there shall be no sound transmission between the two halls. Seating on the main floor is removable to permit dancing and other functions requiring a clear floor space. ¼in scale and ½ F.S. details of the small stage are shown below.





Views of the promenade lounge looking towards the mezzanine floor. The section is taken through the lounge bar.





GENERAL CONTRACTORS : J. GERRARD & SONS.

Subcontractors

Asphalting : Davies Bros. (Manchester) Ltd. *Carpets and Furniture* : Kendal Milne & Co. (Harrods) Ltd. *Insulated Screeds to Flat Roof* : Celcon Ltd. *Cleaning of Stonework* : Leeds Cleaning Co. Ltd. *Cork Flooring* : Jacunello Ltd. *Curtains* : Goodall, Lamb & Heighway (1936) Ltd. *Decorative Glass* : Charles Lightfoot Ltd. *Decorative Metalwork and Balustrades* : Geo. Wragge Ltd. *Electrical Installation* : S. H. Heywood & Co. Ltd. *Electric Tuning Note* : Ferranti Ltd. *Fibrous Plaster* : David Esdale & Co. Ltd. *Fire Prevention Installation* : Saunders & Taylor Ltd. *Fire Alarms—Automatic* : Associated Fire Alarms Ltd. *Furniture* : Maple & Co. Ltd. ; Waring & Gillow Ltd. *Hall Seating* : Cox & Co. Ltd. *Heating and Ventilating Services* : Saunders & Taylor Ltd. *Hyde Panelling* : Bath Cabinet Makers & Artcraft Ltd. *Ironmongery* : James Gibbons Ltd. *Library Shelves* : Sankey-Sheldon Ltd. *Lifts* : G. B. Kalee Ltd. (Piano Lift) ; Wm. Wadsworth & Son Ltd. (Service and Passenger). *Light Fittings* : General Electric Co. Ltd. ; Merchant Adventurers of London Ltd. ; Troughton & Young Ltd. *Lightning Conductors* : John Falkner & Sons Ltd. *Masonry and Sculpture Figures* : F. M. & H. Nuttall Ltd. *Metal Furniture* : Pel Limited. *Metal Rails to Balcony Fronts* : H. H. Martyn & Co. Ltd. *Mirrors for Dressing Room* : Berlyne Bailey & Co. Ltd. *Maquette of Main Hall Seating* : T. F. Firth & Sons Ltd. *Music Stands* : Ardenr & Co. Ltd. *Organ* : John Compton Organ Co. Ltd. *Pavement Lights* : A. Lees Ltd. *Pianos* : Steinway & Sons. *Plastering and Painting* : W. J. Roberts & Son Ltd. *Plaster* : Carlisle Plaster & Cement Co. *Precast Concrete Floor, Roof and Balcony Units* : C. Musker Bros. Ltd. *Public Address System* : E.M.I. Sales & Service Ltd. *Rubber Floors* : Korkoid Decorative Floors. *Sanitary Fittings* : Horrison Ingram & Co. Ltd. *Steelwork* : Redpath Brown & Co. Ltd. *Steel Flooring, Stairtreads, Handrails and Gas Tube Rails* : Robert Walker & Son (Manchester) Ltd. *Stone Carving* : Hewitts Ltd. *Terrazzo* : Conway (Tiles) Terrazzo Ltd. *Thermosteel Insulated Decking* : D. Anderson & Son Ltd. *Travertine and Black Marble Paving* : C. & H. Patteson Ltd. *Vacuum Cleaning Plant* : Sturtevant Engineering Co. *Windows—Metal* : Williams & Williams Ltd.

The facades adjoining Peter Street and South Street have been retained. The new elevation to Windmill Street, shown above, is in golden biscuit coloured sand faced bricks with sandstone dressings. The projecting piers are surmounted by figures in Portland Stone modelled by Mr. A. Sherwood Edwards.

Architect :
CECIL HOWITT, F.R.I.B.A., M.T.P.I.
City Architect

The following senior members of the staff of the City Architect's Department have been associated with the reconstruction :—

Senior Assistant Architect in charge :	*H. Hollingworth*
Senior Assistant Architect :	*G. Bardsley*
Chief Building Engineer :	*G. Brooks*
Senior Assistant Heating & Ventilating Engineer :	*J. T. Strogen*
Senior Assistant Electrical Engineer :	*W. Seddon*
Assistant Structural Engineer :	*K. Wallace*
Chief Quantity Surveyor :	*T. Kinsella*
Deputy Chief Quantity Surveyor :	*H. M. Stafford*
Assistant Quantity Surveyor :	*A. W. Nightingale*

RECONSTRUCTION OF THE MANCHESTER FREE TRADE HALL

NOTE BY HOPE BAGENAL, F.R.I.B.A.
Acoustic Consultant

THE new Free Trade Hall had a reputation to maintain in acoustics. The older hall was one of the best of the Victorian city halls. It was free from echoes; it had a reverberation-time, when full, of 1.75 sec. which gave some musical tone; its dancing floor sloped up about 18in giving a slight improvement to rear stall seats; and for the speaking voice, in the days when public speakers knew how to speak in public, it was considered satisfactory. In those days it held about 2,200. The new hall is still a general-purpose hall first and foremost: it holds for orchestral concerts about 2,500. To do this on the same site height is increased and galleries overhang more, and this means more seats in sub-gallery areas deprived of normal ceiling reflections. In order to counteract this and to direct sound in under galleries the platform canopy was designed in a series of three convex reflectors each giving maximum spread as from a corresponding platform area below. In other words each covers all—which is the peculiar service of the convex splay. It ensures also that any return sounds are not focused back onto platform and stalls. The platform height, 5ft. above floor, is the old high tradition lifting soloists and front row of strings well aloft, but also inevitably screening players behind on the flat from stalls seats.

Owing to the overhang of galleries the hall really forms two auditories with two sets of acoustic conditions—that at Stalls level, and that at Grand Circle level. This is reflected by the measured reverberation figures taken by the Building Research Station, namely:—at Stalls level 1.5 secs., at Grand Circle 1.8 secs. At Stalls level there are no wall absorbents; the rear wall is straight, not curved, on plan and is given a large cove; the structural splays at rear have been stepped but not made absorbent. At floor level, however, a canvas druggett has to be in place under seats to protect the dance floor, and this increases unwanted absorption. At higher levels, the remote rear parapets have been made absorbent to prevent echo risk and ensure clean rapid playing. The ceiling is coffred to a total of 3ft in depth. Musical tone is no doubt fuller at the Grand Circle level, but has sufficient strength even when heard from a seat deep under the galleries. There are no gallery carpets; middle-pitch absorption is reduced to a minimum.

In the Canopy two sets of openings each 12in in diam. provide for organ loudspeakers and for speech loudspeakers covering the main seating. Care was also taken to cover platform seats behind the microphone; also, since rear floor seats were deep under gallery, loudspeakers were inserted in the gallery soffit but were subjected to the new mechanical delay in order that arrival times of the various sounds should synchronize on the ear. This delayed system was designed in conference with the Building Research Station and the engineers of the supplying firm Messrs. E.M.I. Though still young it is highly promising, and may answer some of the many unsolved problems of amplification in large halls having sub-gallery spaces.

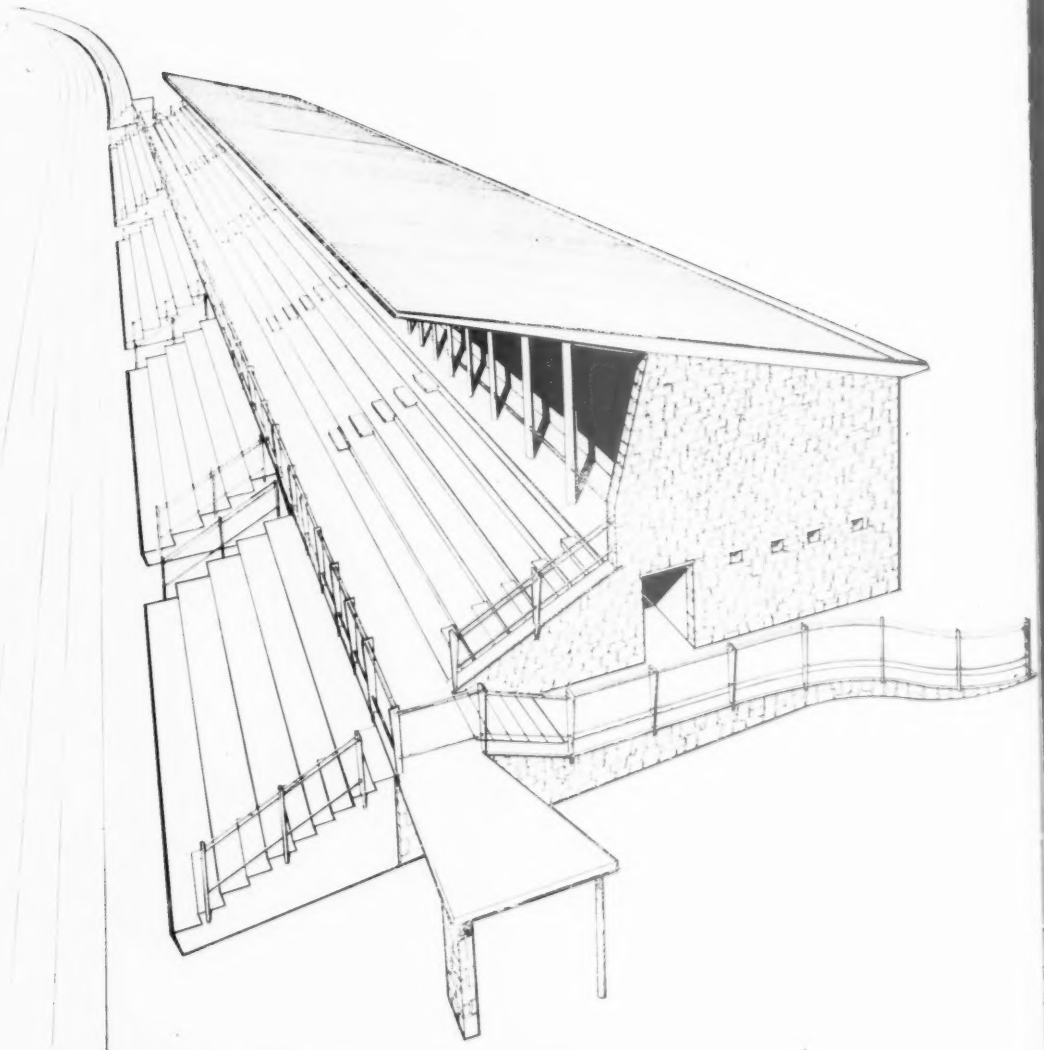
The electrophonic organ was specially designed for the hall by the John Compton Organ Company.

The Lesser Hall adjoins the left flank wall of the Great Hall and some careful sound-insulation by means of dissociated load-bearing structure, and partitioning structure, was found necessary, and was successfully carried out by the City Engineers. The success of the acoustical measures throughout are largely due to their frank recognition, and engagement at sketch design stage, by the City Architect, Mr. Leonard Howitt and his team of assistants.

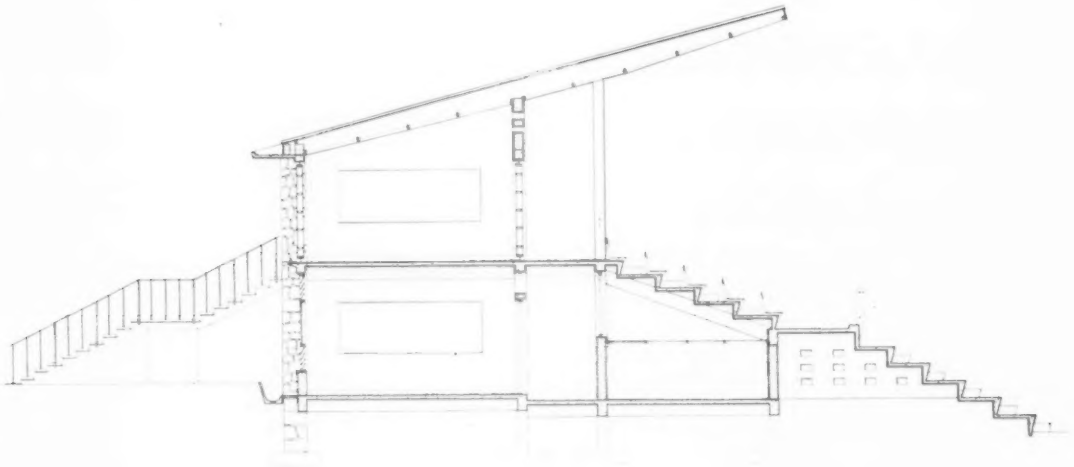
SPORTS STADIUM

AT ACCRA, GOLD COAST

architects: F. HEATHER HUGHES, A.R.I.B.A.
JOHN P. LOMAX, M.A., A.R.I.B.A.



Perspective of the Stand from the North-East



THE provision of a Sports Stadium at Accra, to serve as a national sports centre, was one of the first tasks of the Gold Coast Amateur Sports Council, who accordingly commissioned the architects to design a scheme which could be built in stages as and when funds were raised by public subscription. The nature of the site, which was presented by the Government and could therefore be overlooked in estimating, and the possibility of building in stages were the main factors in the control of the design.

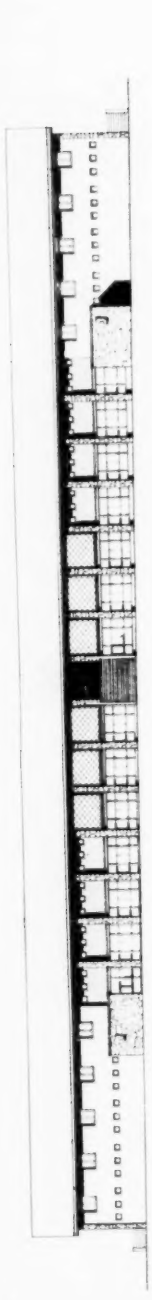
A programme of requirements was drawn up, in consultation with the Council, based on the provision of maximum initial facilities for players and athletes with an easily expandable system of seating. It was considered that the site allowed an International football pitch ; a 440-yard six-lane running track with high jump, long jump, pole vault, discus throw, etc. ; six match tennis courts and two volley ball courts ; one hockey and one football practice pitches Accommodation was to be arranged for a minimum of 10,000 spectators with an eventual maximum of 20,000.

Site

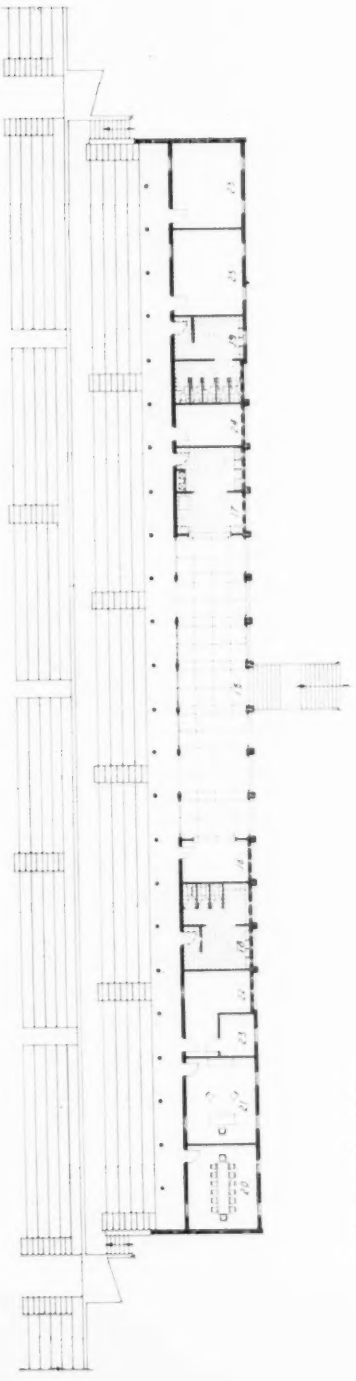
The site lies to the East of Accra and to the West of the suburb of Christianborg. It is bounded to the South and East by main roads, along which most of the spectators will travel on foot, and commands a prospect to the South over the cricket oval and polo ground to the sandy beaches on the sea front.

Stand

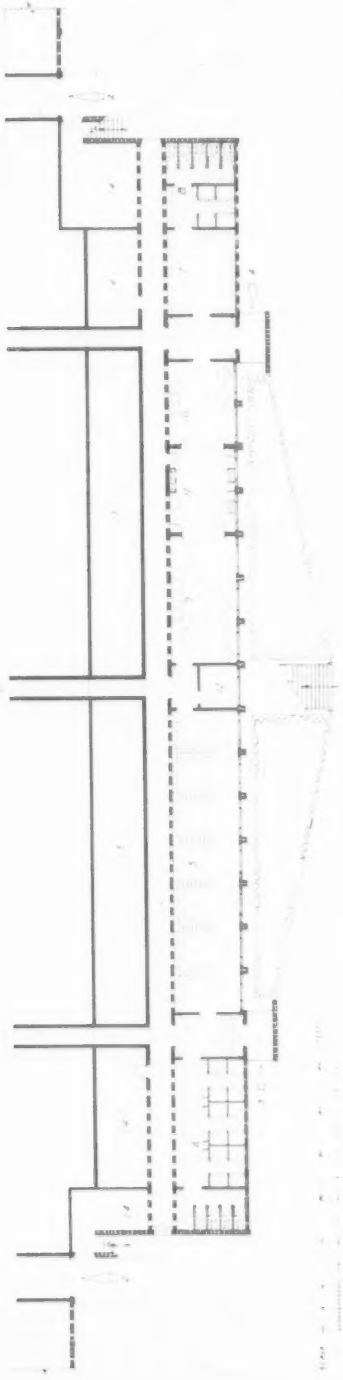
The stand provides covered seating for 750 spectators. These seats, which are at first-floor level, are approached by a central staircase and through a spacious foyer. Refreshment counter and enquiry desk are planned to open directly off this foyer whilst cloakrooms are arranged nearby. Accommodation is also provided, at a lower level, for 2,500 spectators on uncovered tiers who approach their seats from entrances at the East and West ends of the central stand.



EAST ELEVATION



FIRST FLOOR PLAN



GROUND FLOOR PLAN

GROUND FLOOR PLAN

KEY TO STAND

ENTRANCES

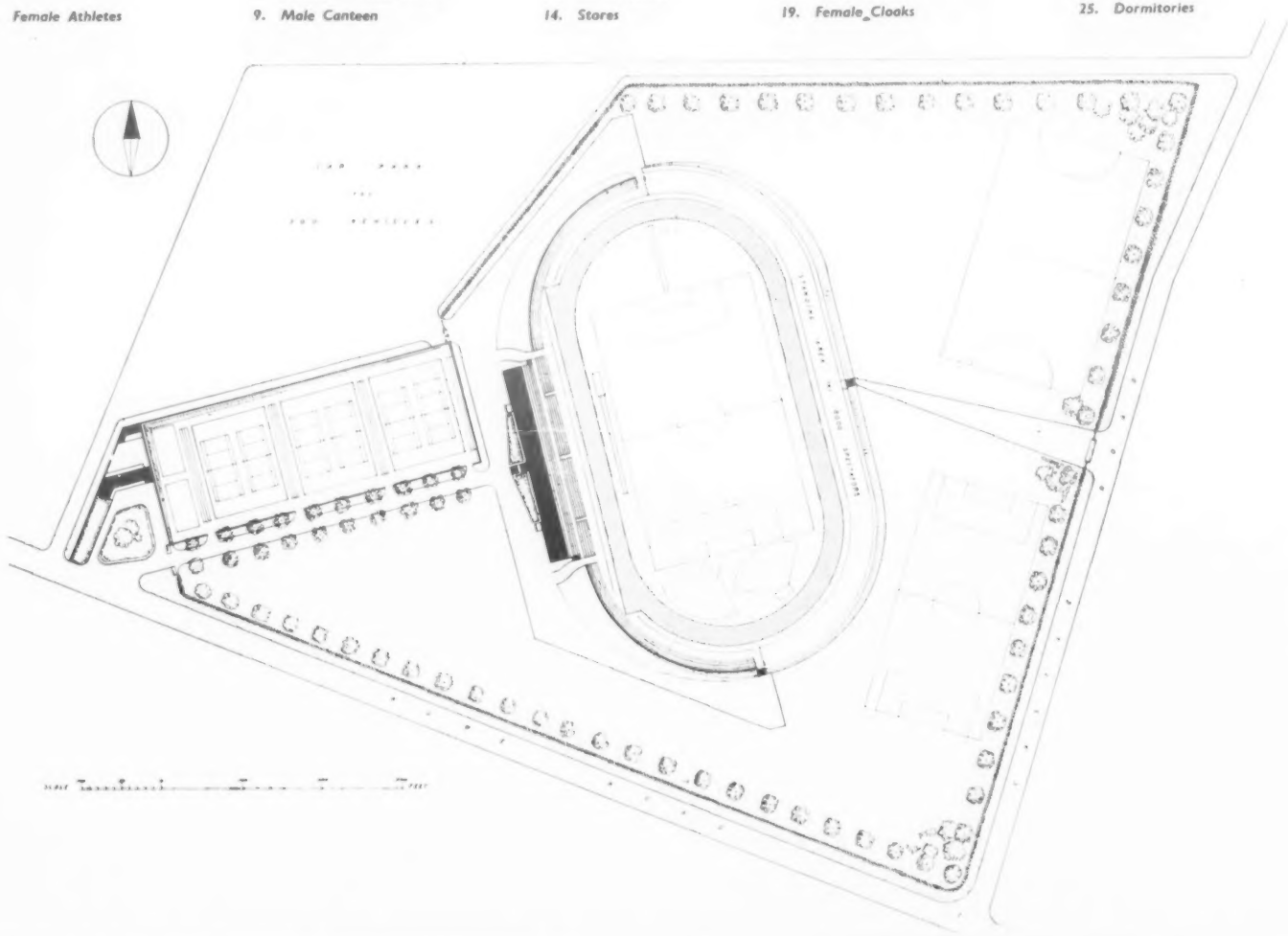
1. To Covered Seating
2. To Uncovered Seating
3. Male Athletes
4. Female Athletes

GROUND FLOOR ACCOMMODATION

5. Male Changing Room
6. Male Ablution Block
7. Female Changing Room
8. Female Ablution Block
9. Male Canteen
10. Female Canteen
11. Servery
12. First Aid Room
13. Water Tanks
14. Stores

FIRST FLOOR ACCOMMODATION

15. Foyer
16. Box Office and Enquiries
17. Servery with Refreshment Counter
18. Male Cloaks
19. Female Cloaks
20. Committee Room
21. Organizer's Room
22. General Office
23. Chief Clerk
24. First Aid Room
25. Dormitories



In addition to the seating there are changing rooms for 150 male athletes and 50 female athletes with showers, locker rooms, canteens and a limited amount of dormitory accommodation for visiting teams. A suite of offices is also provided for the use of the Council, the Sports Organizer, the various committees and the clerks.

The construction is a reinforced concrete frame with solid suspended floors and tiered seating. A light timber and asbestos roof is carried on cantilevered beams which are strengthened at intermediate points by cross-braced r.c. purlins. External walls are of concrete block and local stone, internal partitions are of hollow clay blocks. An interesting feature of the design is that all rain water is collected from the single pitch roof in an in-situ concrete gutter which discharges by mosquito proofed pipes into water tanks under the tiers of seats. A constant supply of water is thus ensured for the grounds during the dry season.

THE ORGANIZER'S HOUSE

The provision of a house on the site for the full-time Sports Organizer was considered highly desirable for the smooth running of the Stadium. It has been sited close to the main entrance in a position which commands a view over the main sports grounds.

The need to ensure privacy to the living quarters of the house, whilst maintaining a central position on the site, and the paramount considerations of cross ventilation and shade to all rooms have dictated the form of the house. Thus the living room, bedrooms and stoep are placed at first floor level where they can obtain magnificent views over the Gulf of Guinea, whilst the office, dining room, kitchen, servery and garage are all at lower level. The boys' quarters are a separate building at the end of a walled compound behind the house.

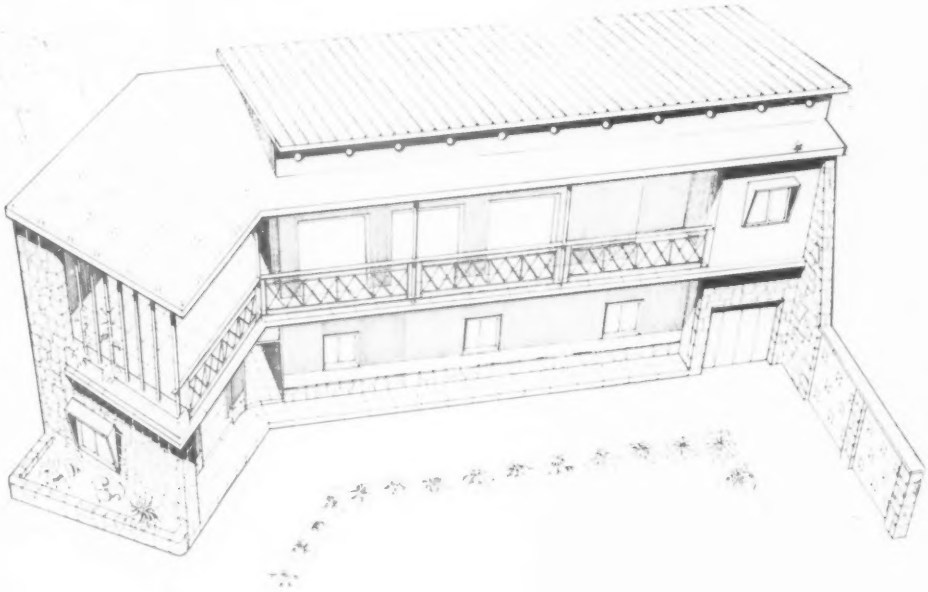
The construction is of suspended reinforced concrete floors on solid load bearing walls in concrete block and local random rubble. A simple asbestos and timber roof, with a well insulated and ventilated cavity, covers the living room and bedrooms. The flat concrete roof over the stoep is protected from the sun's rays by solar tiles loosely laid.

General

A local character has been given to both buildings by the use of stone quarried from the neighbourhood which is contrasted with areas of rendered blockwork walling painted for the most part in white relieved by small areas of strong colour. The athletes' entrances are marked by two giant African masks in ebony which will make a striking accent against the rubble walls. The house follows the local vernacular in its use of wide shady balconies with timber balustrading in simple geometrical patterns.

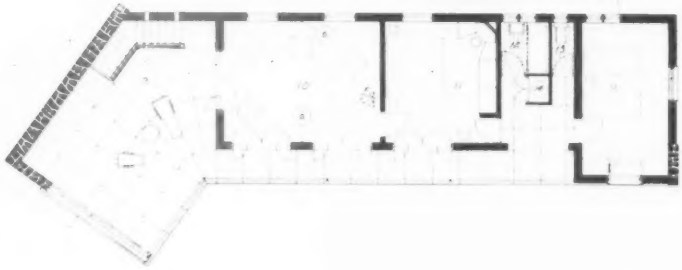
Contract

Work was commenced in June of this year, at an estimated cost of £42,000, and is scheduled to be completed by March 1952. The contractors for the buildings are Messrs Walter Loeb of Accra; the site works are being undertaken by the Sports Council assisted by various local organizations.



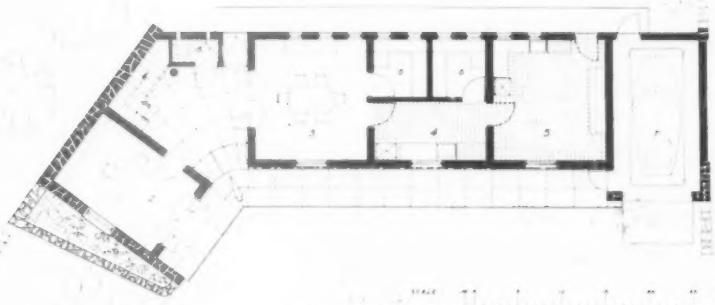
FIRST FLOOR

9. Stoep
10. Living Room
11. Bedrooms
12. Bathroom
13. W.C.
14. Airing Cupboard



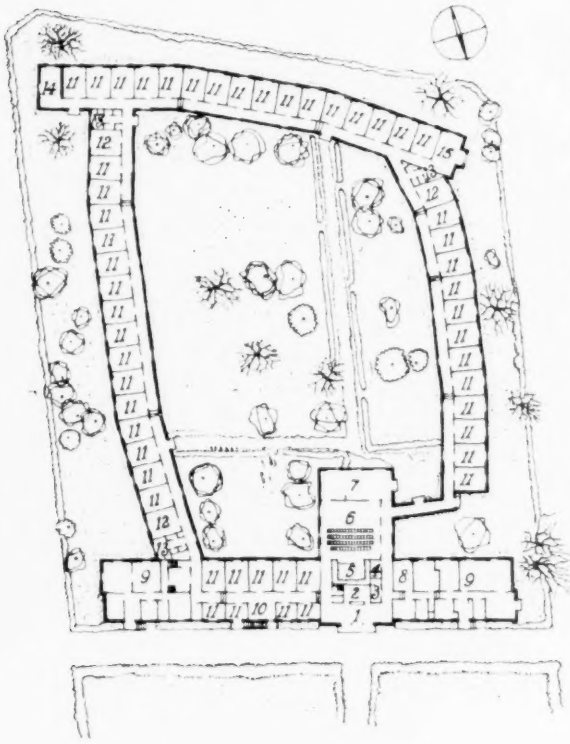
GROUND FLOOR

1. Entrance Hall
2. Study
3. Dining Room
4. Servery
5. Kitchen
6. Stores
7. Garage
8. Cloakroom



THE ORGANIZER'S HOUSE

Hostel for Students, Aarhus, Jutland



KEY TO PLAN

1. Main Entrance Hall. 2. Cloaks. 3. Toilet, men. 4. Toilet, ladies. 5. Stage. 6. Assembly Hall. 7. Common Room. 8. Office. 9. Staff Quarters. 10. Lounge space. 11. Student bed-sitting room, containing bed, writing desk, bookcase, cupboard, etc. 12. Dining kitchen. 13. Toilet accommodation including baths. 14. Music room. 15. Studio for painting.

DURING the operation of the resistance movement in Denmark, a strong feeling of fellowship grew up between the representatives of various groups of the population, a fellowship it was desired somehow to preserve.

Shortly after the war, the thought arose of establishing colleges or hostels in the two University towns, Copenhagen and Aarhus, for the sons of partisans.

The photographs illustrate the Students' Hostel at Aarhus, designed by C. F. Moller, M.A.A., who is one of Denmark's foremost contemporary architects.

The site on which the hostel is built is ideal, it has a slope from north to south; advantage has been taken of this in the elevational treatment, by means of stepping down at intervals. Advantage has also been taken of the existing trees.

The plan consists of an asymmetrical block facing the road, containing administrative offices, small assembly hall, with a common room behind, etc.

From the east side of this block, and the west side of the assembly hall, run connecting corridors, off which are the student study bed-sitting rooms; this type of planning has formed a courtyard round existing trees, making an ideal place for students to study in the open air.

Small dining kitchens are dispersed in the student's block, for preparation of meals and dining.

MATERIALS

External Walls

These consist of light buff multicolour facing bricks. Pattern brickwork at main entrance formed by recessed headers.

Roof Materials

Over main entrance, light multicolour pantiles, remainder of building, light multicolour roman type tiles.

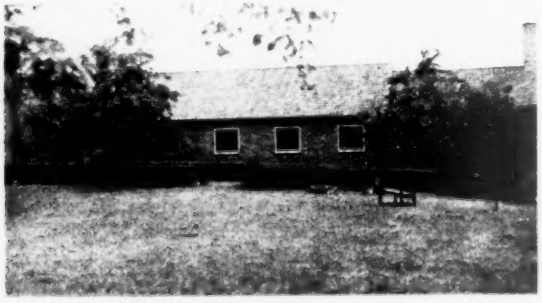
Internal Finishes: Main Entrance Hall

Light buff hard burnt bricks to floor and walls. Ceiling light hardwood slats, above same a layer of rock wool for insulation.

Students' Rooms

Plaster finish to walls, ceiling light hardwood slats. Windows throughout, dark oak, double glazed, centre pivoted.

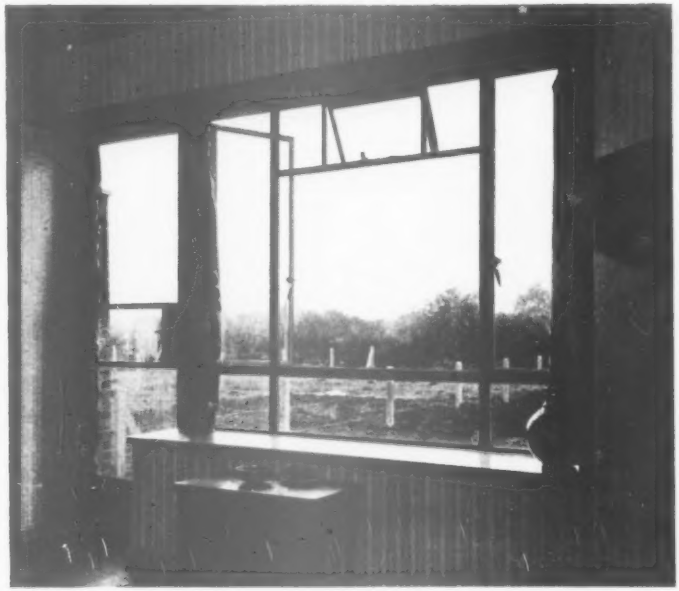
Photos: Denis Vincent



View looking towards students' rooms showing typical elevational treatment.

View of main entrance showing pattern brickwork, formed with recessed headers.

The £1,000 HOUSE



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A view of shops that flanked the entrance to the Albany in Piccadilly, London, in 1804.

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News of the BUILDING INDUSTRY

A REPORT ON A VISIT TO THE UNITED STATES BY N. A. RICHARDSON, B.Sc., A.R.I.C., has now been issued. The author is in charge of the Wood Preservation Section of the Forest Products Research Laboratory of the Department of Scientific and Industrial Research.

In view of the grave shortage of timber in the United Kingdom and the paramount need for preserving all that is used under conditions favourable to decay, it was felt that the visit should be undertaken to enable the author to see wood-preserving plants and to discuss with leading members of the industry modern methods of wood preservation, which have reached a high degree of efficiency in the U.S.A. The visit was made under the auspices and through the generosity of the Economic Co-operation Administration.

The main objects of the tour were to study modern American practice in wood preservation, and in particular to learn, amongst other things, details of the techniques used in the pressure-treatment of Douglas fir, hemlock, cedar and southern yellow pine; the protection of building timbers against decay and termite attack; the use of wood preservatives other than creosote.

Other studies included the fire-proofing of timber and the testing of impregnated timber and treatments for improving or altering the physical properties of wood.

It is proposed to circulate a detailed report of the visits as widely as possible among users of timber and those engaged or vitally interested in the field of wood preservation.

The information obtained as a result of the tour will be used as material for lectures and articles in the technical Press. This information will also be of much value in discussions with visitors to the Laboratory and in answering the numerous technical enquiries on wood preservation which come to the Laboratory, as the central source of information on timber and its uses in the United Kingdom and the Colonies.

*

PUDSEY TOWN COUNCIL has decided to offer an incentive bonus to contractors building houses for the Corporation. Subject to the approval of the Ministry of Housing, a sum of £1 per house will be paid for each week that a house is ready for occupation before the time stipulated in the contract.

*

THE 15th ANNUAL DINNER given by the Directors of Wates, Ltd., to their staff took place at the Café Royal, Regent Street, W.1, on Monday, December 17, 1951.

Amongst the guests present were Sir Jonah Walker Smith, Mr. R. Bruce Wycherley, M.C., F.C.I.S., Managing Director of the Abbey National Building Society, and Mr. E. L. Jones, London Regional Secretary of the National Federation of Building Trades Operatives.

Mr. Norman E. Wates took the chair, and the toast to the staff was proposed by Mr. Ronald W. Wates, J.P., L.C.C., who said that the company had had a record turnover during 1951 and that from the point of view of work in hand and work in prospect the future looked assured. Nearly 10,000 non-traditional permanent houses were on order.

THE L.M.B.A. is to be responsible for the administration of the London Master Plasterers' Association as from January 1.

The L.M.P.A., founded in 1899, became one of the trade organizations affiliated to the L.M.B.A. in 1930, and there has been a very close relation between the two organizations and their members. In 1949 an Affiliation Agreement was signed between the National Federation and the National Federation of Plastering Contractors, of which latter body the L.M.B.A. was, in effect, the London Region. The terms of the National Affiliation Agreement brought all members of those bodies into membership of the National Federation, and the National Federation and its regions took over the administration of the plastering sections. So that the identity of the L.M.P.A. should not be lost, a clause was brought into the agreement by which the L.M.B.A. was left to make appropriate arrangements with the L.M.P.A. within the terms of the general affiliation. This has now been done.

Under the new arrangements the L.M.P.A. retains its identity as the official body representing the plastering contractors of London, but the L.M.B.A. now takes over its administration, the secretary of the L.M.B.A. becoming the secretary of the L.M.P.A. which will now be administered from 47, Bedford Square.

*

MR. ERIC A. SEAL, C.B., has been appointed as a Deputy Secretary of the Ministry of Works. Mr. Seal succeeds Sir Nicolas de Villiers, K.B.E., appointed Deputy Secretary, Ministry of National Insurance.

*

THE MINISTRY OF WORKS announces that, following increases in costs, the British Bath Manufacturers' Association, Limited, has been authorized to raise the maximum prices of commercial-quality baths by 10 per cent, with an additional increase of 14s per bath in the case of the 5ft 1in rectangular bath.

*

ARMSTRONG CORK COMPANY, LTD., have now opened a further office in the Birmingham area at Westminster Chambers, 93a, Corporation Street, Birmingham.

The firm's Dublin office has also lately changed its address and is now at 54, Middle Abbey Street, Dublin.

*

THE MINISTRY OF SUPPLY announces that complaints have been received from building contractors and manufacturers about the prices they are being charged for steel sold to them under the guise of "fabricated" steel.

Common expedients in use are the bending of reinforcement rods and the drilling of holes in angles and sheets. Purchasers usually do not need the steel to be thus "fabricated," but they are required to pay very high prices for these simple processes.

The Ministry regards these steels as price controlled. Investigations are proceeding with a view to prosecuting those who contravene the Iron and Steel Prices Orders, when becoming involved in such transactions.

*

AT THE NORTHERN POLYTECHNIC, London, E.C.1, a course of lectures on the Corrosion of Metals is to be given on Tuesday evenings starting on January 15. Application forms may be had from the Department of Applied Chemistry, Northern Polytechnic, St. John Street, E.C.1.

*

MR. ANGUS BUNTING, president of the London Region of the Federation of Master Builders speaking at a meeting of the London Area 4, Hornsey, on December 18, drew attention to the years before the war when no housebuilder would have considered it economical to build less than 80 houses on one piece of land. The type of operation the builder liked to carry out would have involved 250 houses. In this way, the builder could order his materials, hire his labour and organize his job in such a way as to ensure maximum efficiency and could sell a house at the lowest possible price.

*

FROM JANUARY 1 the telephone number of Messrs. William Mallinson & Sons, Ltd., timber and veneer merchants and plywood manufacturers, of 130-150, Hackney Road, London, E.2, will be Shoreditch 7654.

CORRESPONDENCE

To the Editor of A. & B. N.

Sir,—I notice in your issue of the *Architect and Building News* for December 13, 1951, page 698, the progress which is being made to facilitate the speedier movement of bricks on building sites by the use of mechanical carriers.

As an "onlooker" who has only a very limited knowledge of these matters, I would like to propose (and to hope that the proposal will be forwarded to the proper quarter) that the form of "cage" or "carrier" for the bricks be modified so as to permit a number of the "cages," when filled, to be stacked one upon the other. The main bearer which is fitted across the top of the brick-fork (cage) in your illustration, referred to above, would need to be counter-sunk if my suggestion were adopted. I would then further suggest that the modified cage be used in the brickmakers' yards for the storage and transportation of the bricks from the makers direct on to the building sites, thus avoiding the unnecessary overheads of the multiple handling of loose bricks at various points in their movement from kiln to the actual point where they are to be put to use as an integral part of a building.

The "cages" could be of various uniform sizes having regard to the carrying capacity of transport vehicles commonly used for this class of transport and also to the size of the building site and local conditions.

No doubt there would need to be an arrangement whereby the brick manufacturers could recover the empty "cages" and to be reimbursed for the temporary loan of the "cages" to the builders, but I see no objection to this and should imagine the saving of labour by the builder would more than offset the sum charged for the hire of the "cages."

On a National level it would be easy to postulate a very considerable saving in building cost and labour if this suggestion were adopted.

I am, etc.,
J. A. TURNER.

GOOD, BAD OR INDIFFERENT ?

No. 60.—By A. FOREMAN

Asbestos-cement Pipes

DURING a recent visit to a housing scheme in course of erection, the foreman called my attention to the use of asbestos-cement gutters, rainwater pipes and soil pipes. He said they were experiencing a great deal of breakage of the pipes, even before the houses were handed over for occupation. I went with him to look at some of the examples as I have frequently heard of similar complaints. The trouble was due, as I expected, and so far as could be judged, entirely to external mechanical damage, such as bumping of the pipes with passing barrows, as in every case the damage seemed to be confined to the length of the pipe just above ground level. This sort of damage is likely to happen not only during construction, but after occupation, when it would be a much greater nuisance. I think there is a very simple remedy, which is to use cast iron for the pipe length immediately above the ground level, as this is likely to withstand damage of this nature rather better than the asbestos-cement.

I have looked up the various British Standards, namely, B.S.569 for rainwater pipes and B.S.582 for soil pipes in asbestos-cement and B.S.460 for rainwater pipes and B.S.416 for soil pipes in cast iron to which the pipes used in these positions are likely to comply, and there appears to be no difficulty in fitting the spigot ends of the asbestos pipes into the socket ends of the cast iron pipes.

I think it is fairly general practice not to joint rainwater pipes but merely to leave the spigot end of the one pipe loose in the socket below it and I can see no great objection to this practice, so long as each length of pipe is securely fixed to the wall with a metal ring clip placed just below each socket. The type of fixing of the ring clips is, of course, dependent on the material of the wall to which they are attached, but it is most important that pipes are kept at least 1½in away from the walls to allow ample space between the greatest projection of the sockets and the wall face. Unlike flue pipes both asbestos-cement rainwater and soil pipes may be jointed with cement and sand. A satisfactory material is a mortar made of one part of cement to two parts of sand with only sufficient water to maintain a really stiff mix. It is important, however, that a material such as tarred rope should be caulked into the joints before filling and pointing with the mortar.

This job, like so many, indicated the difficulty of painting asbestos-cement when it is new; in my experience it is wise to leave it unpainted for as long as possible so that the weather may act on it. A large number of different types of paint have been tried for the treatment of asbestos-cement and in my opinion the most satisfactory types so far seem to be those which have a chlorinated-rubber base or alternatively a bitumen base. I am hoping that when the British Standard Code of Practice for painting is ultimately issued this will give the guidance on painting of this material which many of us have been seeking for years.

This discussion on asbestos rainwater pipes reminds me of some other points in connection with asbestos-cement flue pipes: these are normally made to comply with one of two British Standards, namely, B.S.567 for the light quality and B.S.835 for the heavy quality. Considerable care should be taken in the selection of the light quality pipes for any particular installation. The light quality pipes are suitable only for use with the smaller gas appliances which do not have temperatures above 500° F. and in which there is no possibility of flame touching the walls of the pipes. The light quality of pipes should most certainly not be used for solid fuel burning appliances, even those of the slow combustion type. For solid fuel installations and the larger gas installations flue pipes complying with B.S.835 should be chosen and even these should not be installed where there is any risk of flame touching the walls of the asbestos pipes; consequently the first 6ft of flue whether pipes or fittings should not be of asbestos-cement but of metal. Asbestos-cement pipes should not therefore be used for connecting domestic boilers or slow combustion stoves to brick flues; for this purpose cast iron is undoubtedly the most satisfactory.

One sees, not infrequently, asbestos-cement pipes poorly fixed. It is particularly desirable that the sockets should be fitted downwards on flue pipes outside buildings in order that there is no risk of rainwater which runs down the pipe penetrating the joints and entering the flue, but when the pipes are installed inside buildings the sockets should be at the upper end of the pipe length to avoid any risk of condensation within the pipe finding its way outwards through the joints. It is particularly important that asbestos-cement flue pipes are properly jointed; cement and sand is not the desirable jointing material, and a specially prepared mixture, usually cement and asbestos fibre, should always be used for the joints, whether internal or external.

When asbestos-cement flue pipes are to be joined to cast iron flue pipes it is most important that they are not a tight fit as there is a very considerable difference in the expansion of the two materials which leads to failures. It seems that the most satisfactory method of jointing is to leave a wide space between the pipes of the two materials and to pack this space with a material such as asbestos cord.

Another small but important point in relation to the fixing of asbestos-cement flue pipes is to see that each length is adequately supported so that there is no risk of the weight of a series of lengths being carried by the lowest pipe or fitting, and it is particularly important to ensure that terminals are securely fixed with proper jointing materials and it is desirable that they should be stayed in addition; I have seen many instances of terminals merely being placed on the end of a pipe from which it was lifted by the wind and broken by falling to the ground.

TIMBER REVIEW

There is not the slightest possibility of the abolition of consumer licensing of softwood in 1952, judging by the plan for softwood imports now being considered by the Trade and Timber Control. It is expected that the importers will be given permission to import about 650,000 standards for 1952, with an additional allowance should they be required to pass any of their purchases to the national reserve stock. They will be free to buy within this limit in any country.

Inevitably the shippers will be chasing British importers with offers of stock in excess of the quantity the trade is allowed to buy, and this should lead to a reduction in the present high prices for most softwood grades and species. The advice given in this column to hold back from the softwood market wherever possible still holds good.

The new importing system should show one welcome change for building and joinery firms. Since 1939 consumers have had to search for the particular species and specifications most suited to their work, often having to be content with the next or third best. Now it will be possible to request an exact specification with a reasonable chance of obtaining it; importers and merchants will now buy with the requirements of their customers in mind. This should lead to more economical use of softwood and some saving in wastage.

Instances have been reported of smaller plywood stockists being ready to sell at reduced prices, mainly to obtain spot cash for commitments, and such offers should be taken avidly, for it is difficult to see how they can be repeated later. Present indications suggest an increase in plywood prices in the immediate future, and within a few months there is certain to be a heavy demand which will artificially force values up. Many plywood stockists have already adopted a policy of holding stocks, even though business has been quiet, in the belief that the market must strengthen now that imports are to be cut. Replacement costs for plywood are in the region of 10 per cent higher than current prices.

In the hardwood trade the position is somewhat similar, and there can be little doubt that the present wide selection in stocks will not be available later. This should not lead to any high prices for such parcels as West African timbers from unknown shippers, though some hardwood importers are holding on to these below-grade stocks in the hope that their value will rise with the general hardwood market. Great care should be taken before any higher offers are made for these timbers. Their quality is often suspect, and they will deteriorate with holding. The quantity available is still large, and there is not the slightest reason for any fancy prices.

The West African trade is likely to be quite different in 1952. Many of the shippers who came into the business in 1951 simply because there was a phenomenal demand from Britain have now been forced out of business; there will be smaller supplies, but generally from reliable shippers, and prices must be higher. These timbers are providing many of the light hardwoods being widely used as softwood substitutes.

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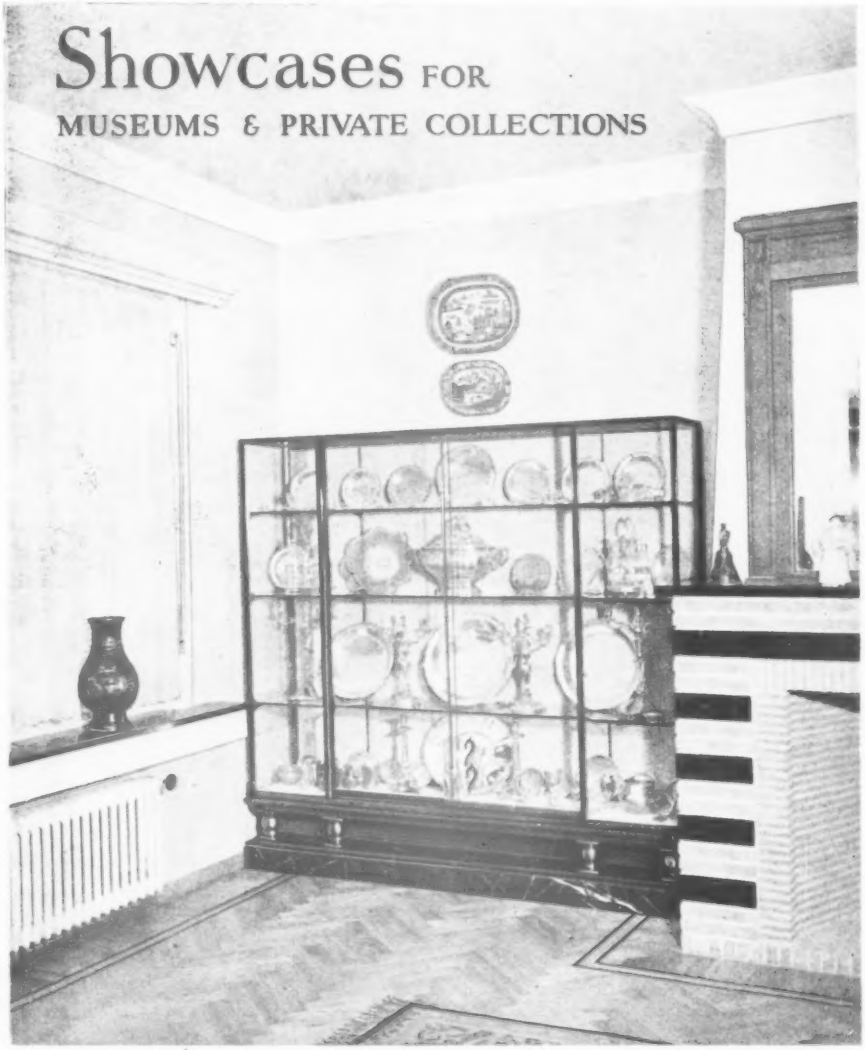

by

FREDK.

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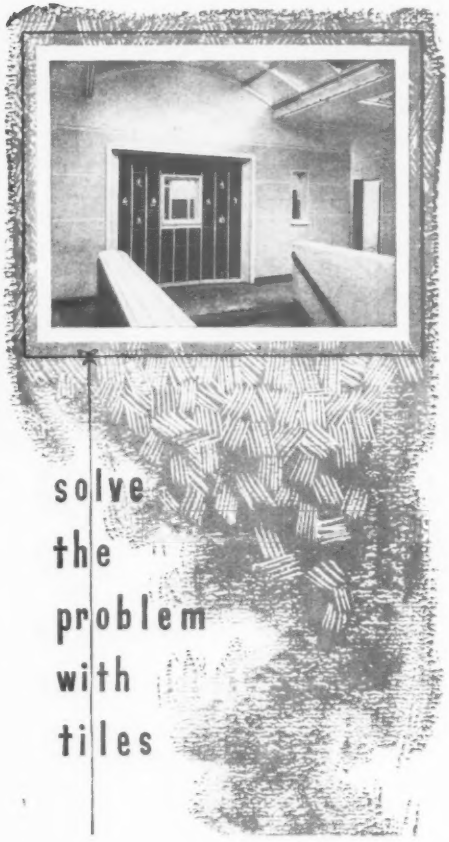

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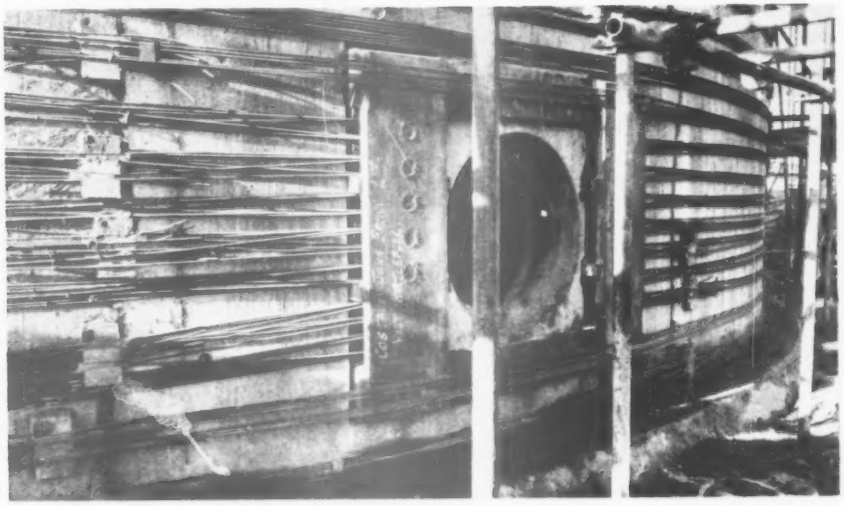


Above : where a manhole occurs in the side of the tank the prestressing cables are anchored to a special frame which maintains continuity of reinforcement.

Below : a cross-section through one of the half tide storage tanks.

PRESTRESSED CONCRETE TANKS AT WEST HARTLEPOOL

for the Ministry of Supply

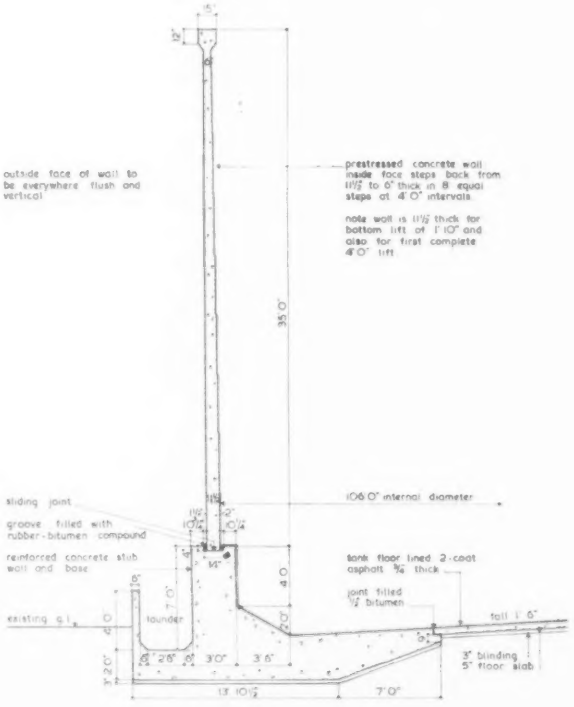
Of five tanks recently completed at the Palliser Works of the British Periclase Company for the Ministry of Supply, two have a capacity of two million gallons each, and are claimed to be the first ever to be constructed in this country in prestressed concrete. The Magnel-Blaton system of prestressing was employed. Two of the tanks are "half tide" storage tanks, each 106ft in diameter and 41ft deep : and one is a sand trap tank 50ft in diameter and 46ft 6in deep. Details of these are illustrated in this article. The other two are reaction tanks, each 30ft in diameter and 36ft deep.

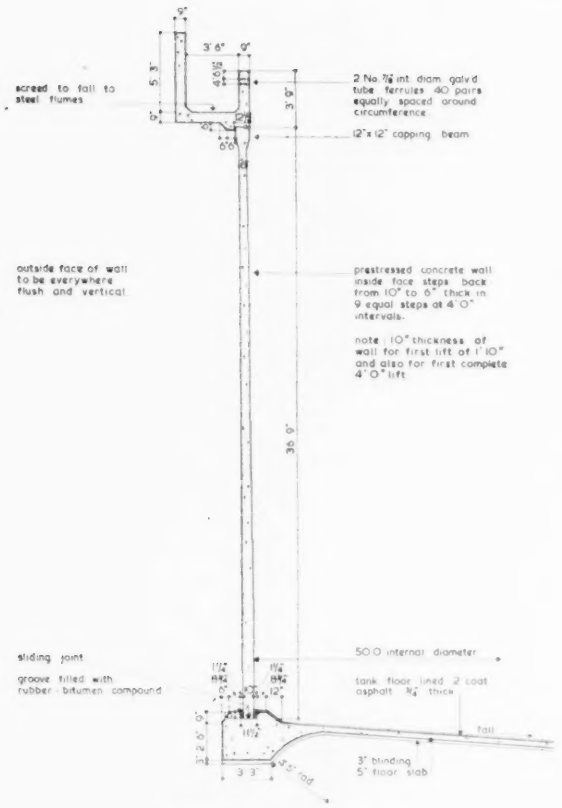
Because these were the first prestressed concrete tanks to be built in this country the tank walls were made thicker than actually required from considerations of working stresses in the concrete, in order to permit the concrete to be easily and properly placed and compacted. Thus the stresses in these tank walls are much lower than are generally used in prestressed concrete design.

Experience has since shown that thinner walls can be satisfactorily concreted, and thus higher stresses may be used.

The sequence of prestressing was to tension first the vertical cables and then the horizontal ones. This ensured that the tensile stresses due to the temporary vertical moments caused by the horizontal stressing operation were counteracted by the vertical prestressing and thus no horizontal cracking could occur.

The horizontal cables are composed of groups of four high tensile wires of either 0.200in or 0.276in diameter depending on the diameter and depth of the tank. These wires lie in a layer, one wire thick, against the external concrete surface ; they are supported in position prior to tensioning by a series of 1in x 16 gauge mild steel vertical strips with notches cut in them to


outside face of wall to be everywhere flush and vertical
prestressed concrete wall, inside face steps back from 1'1½" to 0" thick in 8 equal steps at 4'0" intervals
note wall is 1'1½" thick for bottom lift of 1'10" and also for first complete 4'0" lift
35'0"
106'0" internal diameter
sliding joint
groove filled with rubber-bitumen compound
reinforced concrete slab wall and base
tank floor lined 2-coat asphalt ⅜" thick
joint filled ½" bitumen
existing g.l.
founder
tail 1'6"
3" blinding
5" floor slab
4'0"
7'0"
3'0"
3'6"
7'0"


screed to fall to steel flumes
2 No. ⅞ int. diam. galv'd. tube ferrules 40 pairs equally spaced around circumference
12"x 12" capping beam
outside face of wall to be everywhere flush and vertical
prestressed concrete wall inside face steps back from 10" to 6" thick in 9 equal steps at 4'0" intervals.
note: 10" thickness of wall for first lift of 1'10" and also for first complete 4'0" lift
36'0"
sliding joint
groove filled with rubber-bitumen compound
50'0 internal diameter
tank floor lined 2 coat asphalt ¾" thick
fall
3" blinding
5" floor slab
3'6"
5'3"
3'0"
3'2"
3'3"

Cross-section through sand trap tank.

ensure the correct spacing of the cables throughout the height of the wall.

When the horizontal cables had been tensioned a light steel reinforcing mesh was fixed to them and a one-inch thick coat of mortar was applied pneumatically over the whole outer surface of the tank walls as a protective covering to the high tensile wires and their anchorages. This mortar also serves to bond the wires to the prestressed shell.

The vertical prestressing was carried out with ordinary Magnel-Blaton cables which were located at mid-thickness of the walls.

From 1ft 6in above the lower anchorage the cables are in a formed duct which was made by a tubular former through which the cables passed. After each lift of concrete had been completed the former was withdrawn and raised to the correct position for the succeeding lift—thus the cables are in a continuous duct above a point 1ft 6in higher than the built-in anchorage. At the bottom of this duct a communicating hole was cored through the outer surface of the wall. After the cables had been tensioned colloidal grout was pumped into this hole to fill the space surrounding the wires, the pump being powerful enough to force the grout the full height of the tank wall, in one operation, until it enveloped the sandwich plate cable anchorage at the top and spilled over—thus ensuring complete filling of the duct and sealing of the cable.

All the tanks were designed with a sliding joint between the walls and base, this joint being formed by constructing a groove in the base and then casting the wall in it.

Because of the number of large pipes which pass into the storage tanks at floor level it was decided to design the base and bottom 6ft height of the wall, together with the low level launder which surrounds these tanks to collect overflow, in normal reinforced concrete. This overcame the problem of having the continuity of the lowest rim of the prestressed shell interrupted by the holes through which the pipes pass.

At the top of the stub wall, which is 3ft thick, a 4in deep groove was formed. In this groove the prestressed concrete shell rests. The lower surface of the groove was steel trowel finished and then given a coat of hot bitumen—this forms the sliding joint surface between the prestressed wall and the stub wall.

The prestressed shell which is approximately 106ft internal diameter and 35ft high, tapers in thickness from 11¼in at the bottom to 6in at its junction with the top rim. The taper is provided in a series of steps on the inside surface—the outer surface being flush and vertical throughout.

The space between the prestressed shell and the sides of the groove in which it is formed is sealed with a rubber impregnated bitumen on the water face. The outer space was also filled to prevent this from becoming packed with blown sand which would restrict the free movement of the shell under service conditions.

The prestressed shell of the sand trap tank varies in thickness from 10in at the bottom to 6in at the top in the same manner as the storage tanks, and in this case is 50ft internal diameter and 40ft high.

Near the foot of the shell there is a 2ft 6in diameter manhole. The vertical prestressing cables are located on either side of this opening. The horizontal prestressing force is carried across the opening by means of a structural steel frame to which the corresponding horizontal cables are anchored. This frame encircles the manhole and was placed after concreting had been completed. It is held in place by the prestressing wires which are anchored to it, or which pass over it.

The Chief Development Engineer for British Periclase Co. Ltd. (Agents for Ministry of Supply) was P. J. Metcalf. The Contractors were Costain-John Brown Ltd. Prestressing Equipment was supplied by Stressed Concrete Design Ltd.

M.O.W. LECTURES

JANUARY 11

DEVIZES at 7 p.m. "SOME FACTORS INFLUENCING THE PERFORMANCE OF WOODWORKING MACHINERY," by P. Harris, B.Sc., A.M.I.Mech.E., of the Forest Products Research Laboratory, Department of Scientific and Industrial Research, in the Assembly Room, Town Hall.

JANUARY 15

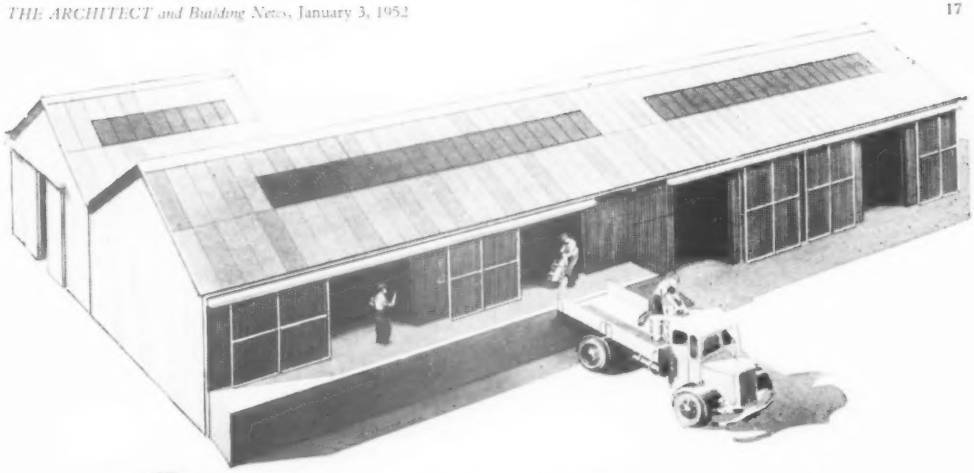
NEWCASTLE-UPON-TYNE at 7 p.m. "HEATING AND HEAT INSULATION," by G. D. Nash, A.R.I.B.A., Dip.T.P., of the Building Research Station, Department of Scientific and Industrial Research, at the Y.M.C.A., Connaught Hall, Blackett Street.

PLYMOUTH at 7 p.m. "SMALL HEATING AND VENTILATING INSTALLATIONS," by J. C. Knight, A.M.I.H.V.E., Civil Engineer's Division, Ministry of Works.

LINCOLN at 7.15 p.m. "MACHINES FOR THE MODERN BUILDER: SOME RECENT DEVELOPMENTS IN BUILDING PLANT," by A. MacNiven-Brown, A.M.I.Mech.E., A.F.R.Aero.S., F.R.S.A., of the Building Research Station, Department of Scientific and Industrial Research, at the Technical College, Cathedral Street.

MANCHESTER at 7.15 p.m. "STRUCTURAL USE OF STEEL IN BUILDING," by G. A. Gardner, O.B.E., M.I.Struct.E., Chief Structural Engineer, Ministry of Works, in the Lecture Theatre, Gas Show Rooms, Albert Square.

SLOUGH at 7 p.m. "PLASTERING," by H. Andrews, B.Sc., A.R.I.C., of the Building Research Station, Department of Scientific and Industrial Research, at the Slough Technical Institute, William Street.



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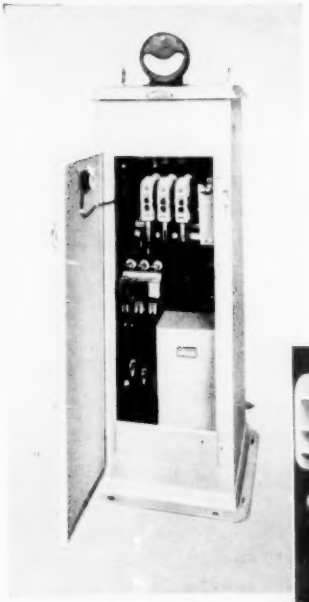

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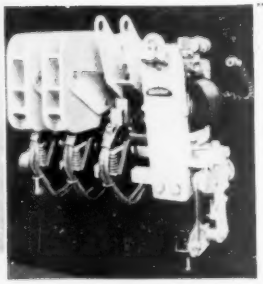

(Left) Standard 'channel-sprung' contactor typical of types handling up to 380 amps., (shown with one arc-shield removed).

(Above) Type SC5H panel, for a.c. straight-on starting, incorporating the above type of contactor, and with standard solenoid over-load trip, isolator, ammeter, etc.

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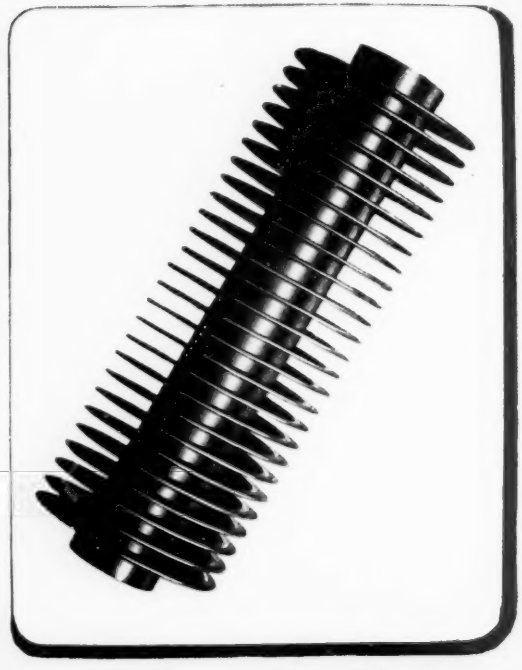

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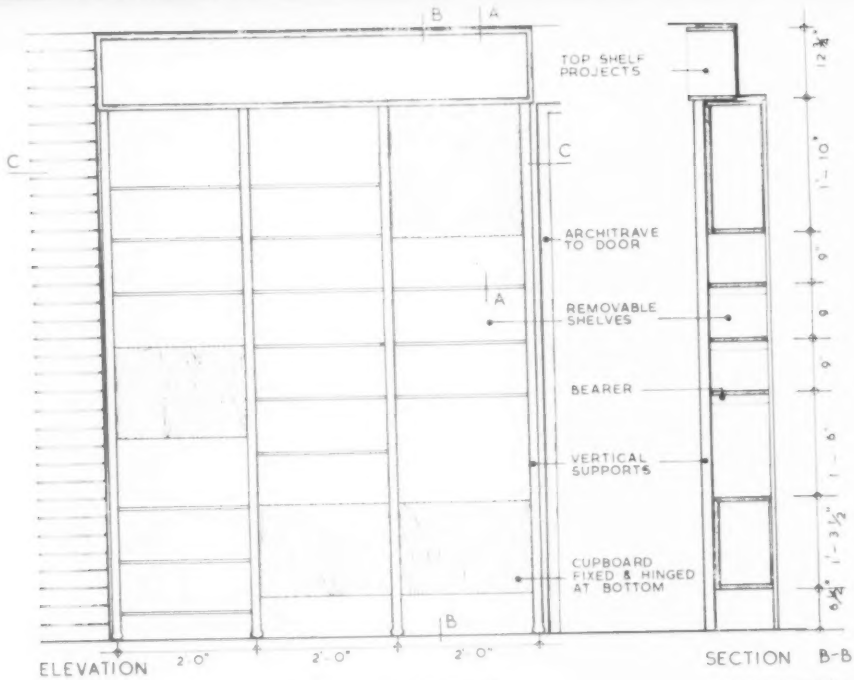

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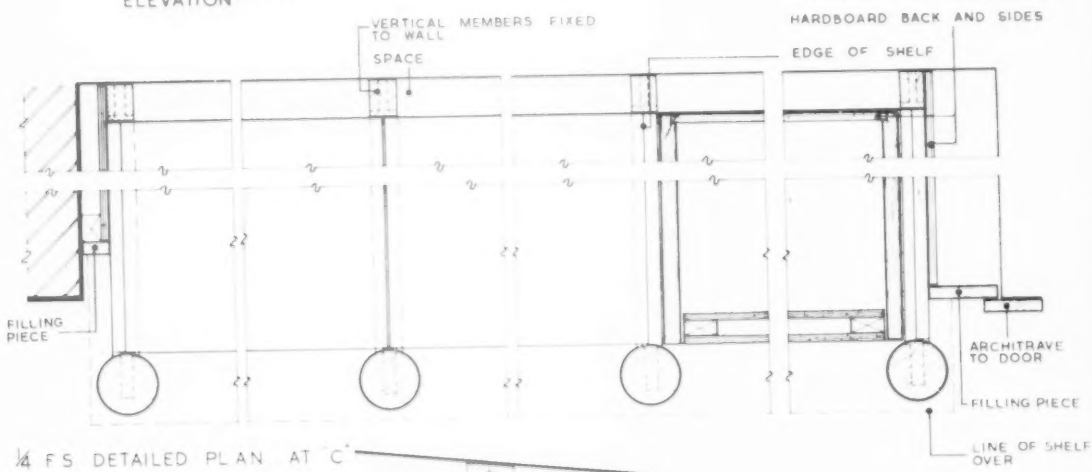
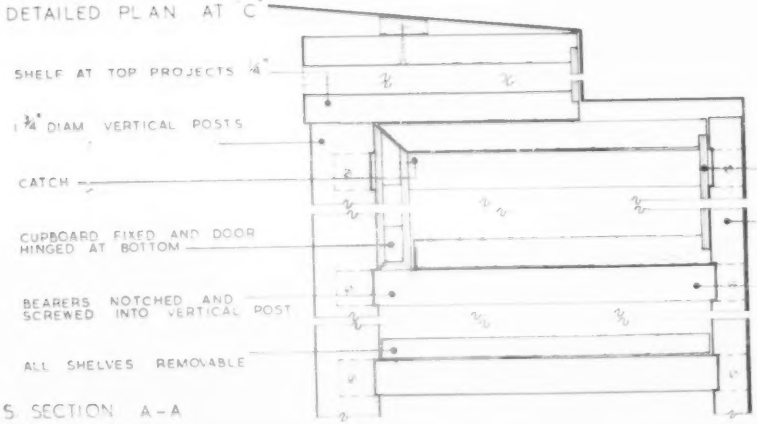


¼ F S DETAILED PLAN AT C"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CONTRACT • NEWS •

Notes below give basic data of contracts open under locality and authority which are in bold type. References indicate: (a) type of work, (b) address for application. Where no town is stated in the address it is the same as the locality given in the heading, (c) deposit, (d) last date for application, (e) last date and time for submission of tenders. Full details of contracts marked ★ are given in the advertisement section.

OPEN

BUILDING

ANDOVER B.C. (a) 12 houses, 8 flats and ancillary works, Mead Hedges site. (b) Borough Surveyor, "Beech Hurst," Weyhill Road. (c) 2gns. (e) Jan. 21.

* * *

BERKSHIRE C.C. (a) 22 police houses, Clewer Lodge Estate, Windsor. (b) County Architect, Wilton House, Parkside Road, Reading. (c) 2gns. (e) Jan. 18.

* * *

BLANDFORD R.C. (a) 28 houses, construction of service road, site works and 4 garages at Durweston, and provision and laying of approx. 413yd of 6in spun concrete and 104yd of sewer, etc., construction of small sewage disposal works and excavation and laying approx. 1,100yd of 3in water main. (b) Council's Clerk, "Nordon," Salisbury Road. (c) 4gns. (e) Jan. 29.

* * *

BOURNEMOUTH B.C. (a) Medway-type temporary school building, construction of foundations, drainage, paths, at Kinson School. (b) Borough Architect (Room 101), Town Hall. (c) 2gns. (e) Jan. 12.

* * *

BULLINGDON R.C. (a) 20 houses at Chalgrove, Oxon. (b) Harry W. Smith, 29, George Street, Oxford. (c) 2gns. (e) Jan. 18.

* * *

CANTERBURY C.C. (a) 62 houses, London Road site. (b) City Architect, Municipal Buildings, Dane John. (c) 2gns. (e) Jan. 18.

* * *

CORNWALL C.C. (a) Adaptation and extension of former Pennygillam Camp, Launceston, as secondary school. (b) County Architect, County Hall, Truro. (c) 5gns. (d) Jan. 5.

* * *

CUMBERLAND C.C. (a) Secondary school at Maryport. (b) Council's Clerk, The Courts, Carlisle, with particulars of contracts carried out. (d) Jan. 18.

* * *

DURHAM COUNTY POLICE AUTHORITY. (a) 1 pair of police houses with office, Welbeck Avenue, Haughton-le-Skerne. (b) Police Authority Architect, Court Lane. (e) Jan. 21.

* * *

DURHAM COUNTY POLICE AUTHORITY. (a) Pair of police houses, Paragon Street, Stanhope. (b) County Architect, Court Lane. (e) Jan. 11.

* * *

DURHAM COUNTY POLICE AUTHORITY. (a) Police house with office, Sacriston Lane, Witton Gilbert. (b) County Architect, Court Lane. (e) Jan. 11.

* * *

EAST RIDING C.C. (a) Midwife's house and annexe at South Cave. (b) County Architect, County Hall, Beverley. (c) 2gns. (e) Jan. 17.

* * *

ELLESMERE R.C. (a) 12 houses at Tetchill, 4 at Petton, 4 at Cockshutt, and 4 at Cockshutt, with sewers, sewage disposal works, roads, etc. (b) Council's Clerk, Council Offices, Trimpley Hall. (c) 2gns. (e) Jan. 9.

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FARNWORTH B.C. (a) 36 houses, Plodder Lane No. 1 site. (b) Borough Engineer, Town Hall. (c) £2. (e) Jan. 14.

* * *

GIPPING R.C. (a) 10 houses at Combs and 4 houses as Greeting St. Peter. (b) Engineer and Surveyor, Council Offices, Needham Market, Nr. Ipswich. (c) £3. (e) Jan. 16.

* * *

HAVERFORDWEST R.C. (a) Public convenience at Llangwm. (b) Council's Engineer, 20, Picton Place. (c) 1gn. (e) Jan. 18.

* * *

KINGSBRIDGE R.C. (a) 2 pairs of houses at Kellaton, Stokenham. (b) Council's Architect, Manor House. (c) 2gns. (e) Jan. 7.

* * *

LEEDS C.C. (a) Veterans' shelter at Cross Flats Park, Beeston. (b) City Architect, Priestley House, Quarry Hill. (c) 1gn. (e) Jan. 14.

* * *

LEEDS C.C. (a) (Contract No. 475) 6 houses, Gipton Estate, (Contract No. 476) 12 houses, Gipton Estate, (Contract No. 453) 8 houses and 20 flats, Swinnow Estate, (Contract No. 477) 20 houses, Swinnow Estate, (Contract No. 478) 36 flats, Swinnow Estate, (Contract No. 479) 42 flats, Swinnow Estate, (Contract No. 480) 36 flats, Beckett Park Estate, (Contract No. 481) 60 flats, Moortown (West) Estate and (Contract No. 482) 60 flats, Moorside Estate. (b) City Architect, Priestley House, Quarry Hill. (c) £1 each contract. (e) Jan. 22.

* * *

LEEDS C.C. (a) Public convenience at Farnley Park. (b) City Architect, Priestley House, Quarry Hill. (c) 1gn. (e) Jan. 14.

* * *

LONDON—EAST HAM B.C. (a) Contract No. 51, 66 houses at Ingrave, near Brentwood. (b) Chief Housing Officer, Town Hall, E.6. (c) 5gns. (e) Jan. 7.

* * *

LONDON—GREENWICH B.C. (a) (1) 18 flats in 3-storey blocks at Invicta Road, Blackheath, (2) 16 flats in a 3-storey block at Kinveaghy Gardens, Charlton, and (3) 12 flats in a 3-storey block at Ashburnham Place, Greenwich. (b) Borough Engineer, Town Hall, Greenwich High Road, S.E.10, stating scheme or schemes. (d) Jan. 9.

* * *

MARKET HARBOROUGH U.C. (a) 16 houses, Southern Estate. (b) Lyndon Rowen, 39, High Street. (c) £2. (e) Jan. 21.

* * *

MIDDLESBROUGH B.C. (a) 22, 18, 16 and 34 houses at Berwick Hills (3rd development). (b) Borough Engineer, Municipal Buildings. (c) 2gns. (e) Jan. 14.

* * *

N. IRELAND—ARMAGH E.C. (a) Girls' high school, Armagh. (b) W. R. Thornton, Education Offices, Courthouse. (c) 5gns. (e) Jan. 14.

* * *

RAYLEIGH U.C. (a) 8 pairs of houses, Vernon Avenue. (b) Council's Clerk, Council Offices, 28, High Street. (c) 3gns. (e) Feb. 4.

* * *

SALE—BROOKS INSTITUTE. (a) Extensions and improvement of Brooks Institute, Ashton-upon-Mersey, Sale, for Trustees of Brooks Institute and Corporation. (b) Mr. J. Cocker, 5, Market Street, Altrincham. (c) 2gns. (e) Jan. 21.

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SALFORD C.C. (a) (Contract No. 1) 4 houses at The Polygon, Broughton, and (Contract No. 2) 4 houses at Lower Broughton Road, for police. (b) City Engineer's Office, Town Hall. (c) 2gns each contract. (e) Jan. 31.

* * *

SUNDERLAND B.C. (a) Repairs to 37 properties in various streets. (b) Borough Architect, Grange House, Stockton Road. (e) Jan. 18.

* * *

SWANSEA B.C. (a) First instalment of multilateral school at Pelnan. (b) Borough Architect, The Guildhall. (c) £5. (d) Jan. 14.

* * *

WARWICK B.C. (a) (Contract No. 1) 20 houses at Stratford Road and (Contract No. 2) 28 houses at George Road. (b) Borough Engineer, 20, The Butts. (c) 3gns. (e) Jan. 21.

* * *

WEST RIDING C.C. (a) Technical college at Cavendish Road, Keighley. (b) County Architect, "Bishopgarth," Westfield Road, Wakefield, after Jan. 25th. (c) 2gns. (e) March 3.

* * *

WESTMORLAND C.C. (a) Old persons' home at Kendal. (b) County Architect, County Hall, Kendal. (c) 2gns. (d) Jan. 7. (e) Jan. 28.

PLACED

Notes on contracts placed state locality and authority in bold type with (1) type of work, (2) site, (3) name of contractor and address, (4) amount of tender or estimate. † denotes that work may not start pending final acceptance, or obtaining of licence, or modification of tenders, etc.

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WALTHAM HOLY CROSS U.D.C. (1) 44 houses. (2) Paternoster Hill Estate. (3) Jenners Builders), Ltd., High Road, Woodford Bridge, Essex. (4) £63,207.

* * *

MANCHESTER CORPORATION. (1) 84 flats. (2) Baguley Hill. (3) J. C. Darley, Ltd., 9, Higher York Street, Manchester.

* * *

WAKEFIELD CORPORATION. (1) 114 houses. (2) Kettlethorpe Estate. (3) Harlow and Milner, Ltd., Warrengate, Wakefield.

* * *

GUILDFORD R.D.C. (1) 38 dwellings. (2) Loanacre site, Ash. (3) E. Clarke and Sons, Ltd., Sayes Court, Addlestone, Surrey. (4) £50,356.

* * *

BRISTOL CORPORATION. (1) School. (2) Hartcliffe. (3) William Cowlin and Sons, Ltd., Stratton Street, Bristol. (4) £125,119.

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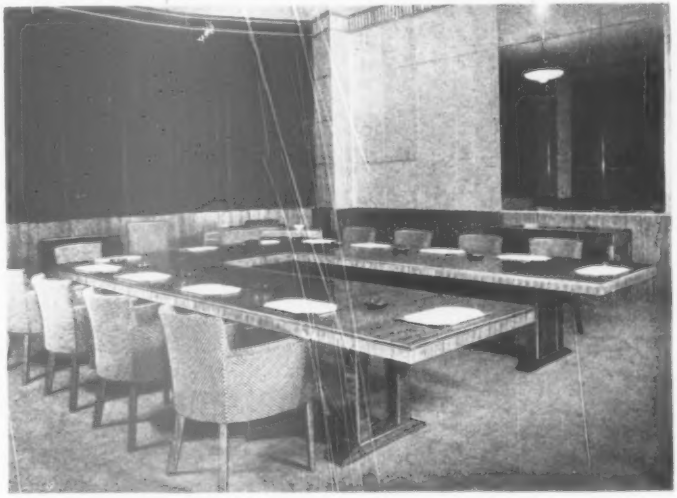

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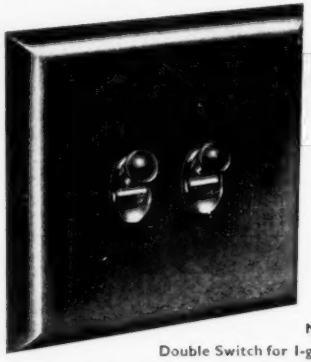

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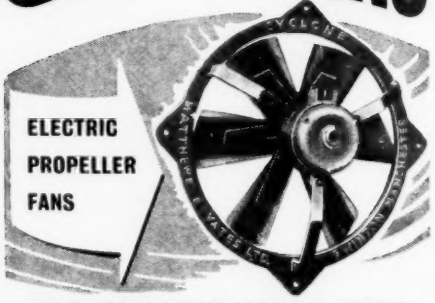

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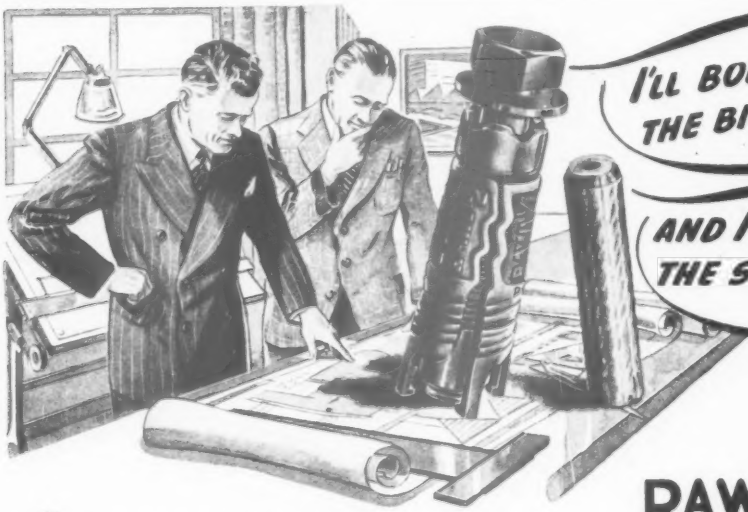

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Although these are not established posts, many of them have long term possibilities and competitions are held periodically to fill established vacancies.

Apply in writing, stating age, nationality, full details of experience, and locality preferred, to Chief Architect, Ministry of Works, Abell House, John Islip Street, London, S.W.1, quoting reference WG10/BS. [5763

ABERDEEN HARBOUR COMMISSIONERS

HARBOUR ENGINEER'S DEPARTMENT

APPLICATIONS are invited for the post of ARCHITECTURAL ASSISTANT or BUILDING SURVEYOR in the Harbour Engineer's Office, Aberdeen. Applicants should have experience in structural steelwork, reinforced concrete and general building design and construction. Preference will be given to candidates with some experience of property procedure and the preparation of reports. The salary £435—£620 according to qualifications, rising by annual increments of £15. Applications stating age and qualifications, with full details of experience, together with copies of recent testimonials, should be lodged with the Harbour Engineer, 15, Regent Quay, Aberdeen, not later than 19th January, 1952.

Harbour Engineer's Office,
Aberdeen. 12th December, 1951. [6045

GOVERNMENT OF NORTHERN IRELAND

APPLICATIONS are invited for the unestablished post of ARCHITECT GRADE C in the Ministry of Health and Local Government.

The salary scale is £575 by £25 to £750 by £30 to £900. A commencing salary above the minimum may be paid to candidates possessing special qualifications and experience.

Candidates must be Registered Architects by examination and should preferably have experience in up-to-date hospital design and layout and some aptitude for research into comparative standards of design and construction.

Preference will be given to candidates who served with H.M. Forces during war-time, providing the Ministry is satisfied that such candidates can, or within a reasonable time will be able to, discharge the duties efficiently.

Applications, giving date of birth, full particulars of qualifications and experience, together with copies of two recent testimonials, should be sent to the Director of Establishments, Ministry of Finance, Stormont, Belfast, so as to reach him not later than 17th January, 1952. [6065

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APPLICATIONS are invited for an appointment to the teaching staff of the Faculty of Architecture. The status and commencing salary will be fixed according to qualifications and experience.

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The successful applicant will be required to take up duties as soon as possible.

Further particulars and information as to the method of application may be obtained from the Secretary, Association of Universities of the British Commonwealth, 5, Gordon Square, London, W.C.1.

The closing date for the receipt of applications is 3rd March, 1952. [6058

APPOINTMENTS—contd.

EDINBURGH CORPORATION

SENIOR DEPUTE CITY ARCHITECT

THE office of City Architect will become vacant in October, 1953. The Corporation invite applications for the appointment now of SENIOR DEPUTE CITY ARCHITECT, salary, approx. £1,750 p.a. Qualifications: A.R.I.B.A., administrative experience.

Six copies of applications and relevant documents (with names of at least two referees) to be lodged with the subscriber not later than 11th February, 1952.

J. STORRAR,
Town Clerk.

City Chambers,
EDINBURGH. 3rd January, 1952. [6060

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S. C. HARWOOD,
Clerk of the Council.

Council Offices,
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Skipton.
3rd January, 1952. [6068

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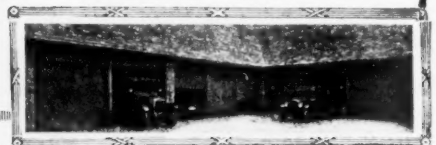

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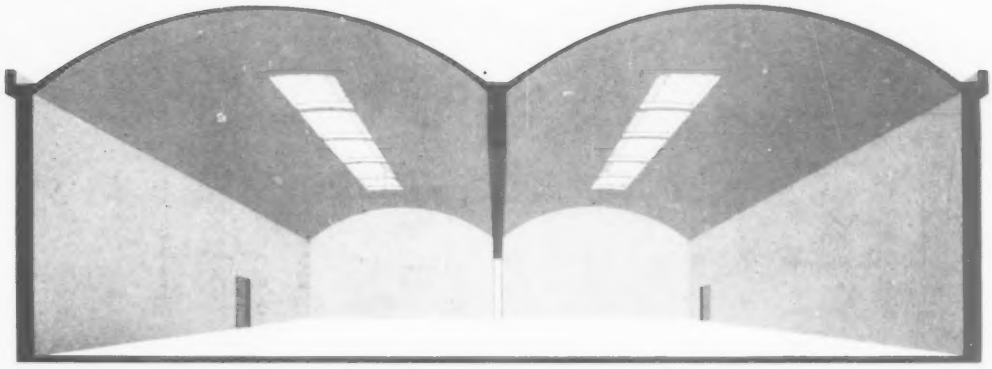

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